

CLAYTONIA

Newsletter of the Arkansas Native Plant Society

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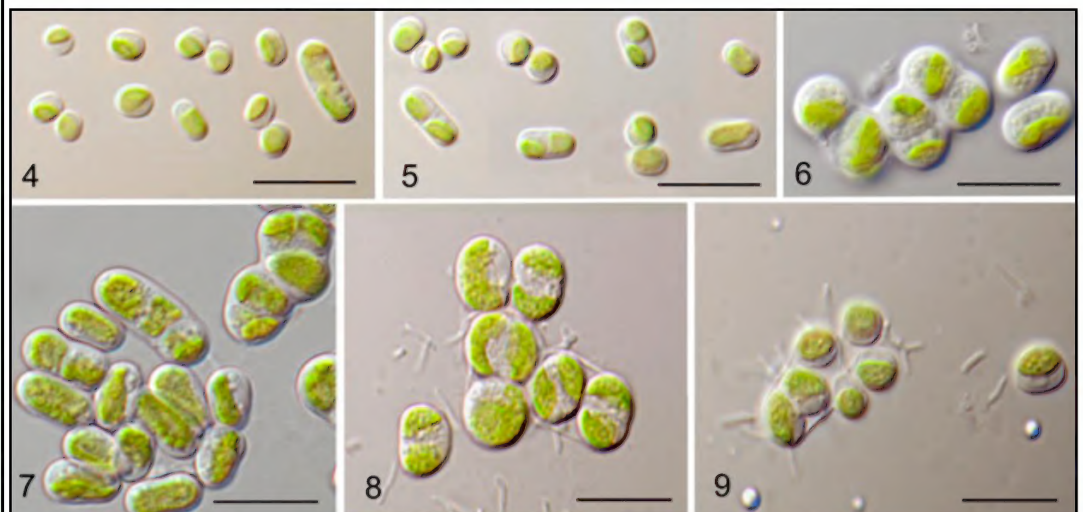
Introducing *Diplosphaera sundellii*

by Karen and Marvin Fawley



Eric Sundell, for whom this alga is named. Photo by Michael Weatherford.

Botanists Karen Fawley and Marvin Fawley at the University of the Ozarks recently described a new species of the green algal genus *Diplosphaera* in honor of Dr. Eric Sundell. The new species, *Diplosphaera sundellii*, was found in the sodic-saline slicks present in Warren Prairie Natural Area in Bradley and Drew Counties. The new species name recognizes Eric's extensive research work in Warren Prairie. Karen and Marvin worked with a University of the Ozarks student, Nedjee Thermozier, to characterize the new species based on morphology and DNA sequence analysis. *Diplosphaera sundellii* is a very tiny alga well adapted to the changing environment of the slicks in Warren Prairie, which can rapidly shift from very wet to extremely hot and dry, an environmental condition known as hydroxeric. The slicks also have an unusual soil chemistry with a high level of sodium ions. The edges of the slicks are home to the diminutive flowering plant, *Geocarpon minimum*, and Warren Prairie also harbors many other rare vascular plants. As it turns out, Warren Prairie also harbors many new species of algae!



Photos of the newly named Diplosphaera sundellii found on Warren Prairie and named after Eric Sundell. Scale bars are 10 micrometers. Photos by Karen and Marvin Fawley.



Nedjee Thermoziar, University of the Ozarks student who worked on the project.

The light microscopy images from the paper show the changing morphology of *Diplosphaera sundellii*. Figures 4 and 5 show cells grown in a liquid culture. The very small (about 2.5 micrometers in diameter) spherical cells enlarge to form elliptical cells (figure 5) that subsequently produce two new spherical cells by simple cell fission. These new cells

are often seen in pairs; hence the genus name, *Diplosphaera*. The remaining figures, 6 through 9, show the very different morphology of the alga when it is grown on a solid substrate, in this case, an agar slant. Under these conditions, *Diplosphaera sundellii* produces much larger cells that have very thick cell walls and are often joined together in pairs or irregular packets. These features are adaptations to reduce water loss under very dry conditions such as those found on the sodic-saline slicks. Even more interesting is a complete switch in the asexual reproduction of this alga. When grown in liquid culture, the cells divide by fission, retaining the cell wall of the dividing cell. In contrast, cells grown on agar divide by the production of aplanospores. In this process, new cells are produced inside the cell wall of the mother cell and these aplanospores form new cell walls. The remnant mother cell walls are clearly visible in figures 8 and 9. When the alga is moved from agar to liquid, it undergoes a series of divisions (figure 9) that result in the reduction of cell size and return to the small, thin-walled form seen in figures 4 and 5. This life cycle allows for small cells with rapid re-

production during wet periods and large cells that can withstand very hot and dry conditions.

The University of the Ozarks student who worked on the project, Nedjee Thermoziar, grew up in Haiti and received his undergraduate degree in Biology in 2023. He is presently living in Texas and is working with a pharmaceutical company that designs new drugs.

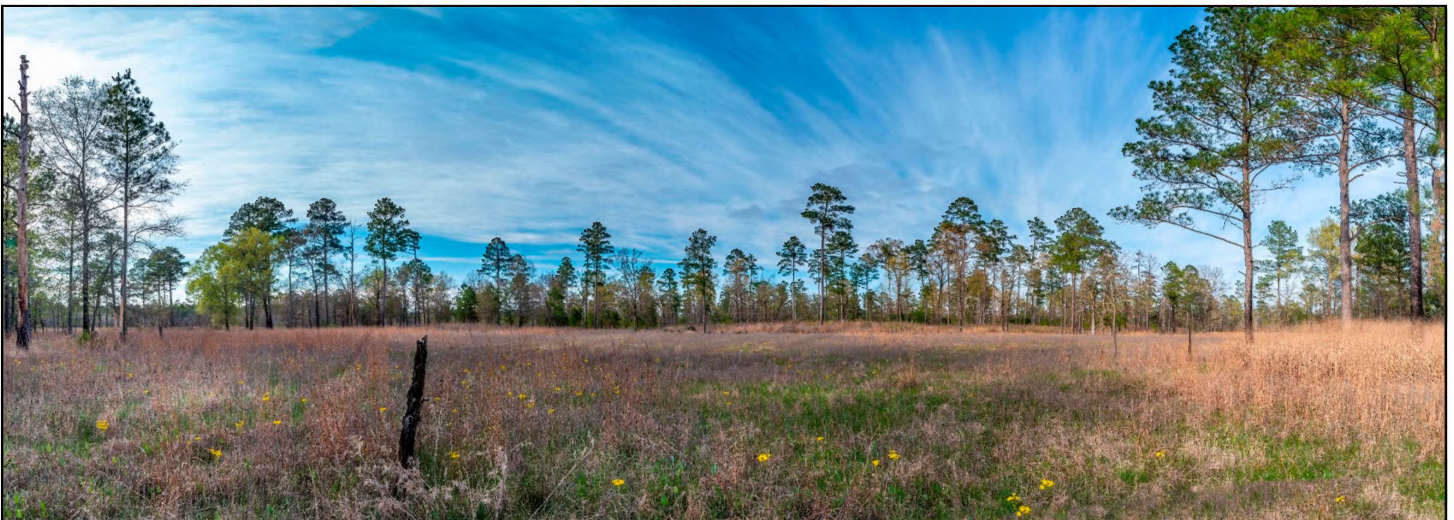
As for the soil algae of Warren Prairie, the Fawleys have a large collection of algal strains from the slicks and sur-



Karen and Marvin Fawley collecting algae at Warren Prairie Natural Area. Photo by Brent Baker.

rounding barrens grassland soils. Nedjee is only the first of several Ozarks students who have discovered new algal species in this collection.

The full paper “A new terrestrial species of *Diplosphaera* (Trebouxiophyceae), *Diplosphaera sundellii*, from a sodic-saline slick in Warren Prairie Natural Area, Arkansas, USA” is available online at: <https://www.researchgate.net/publication/378910457>.



Open savanna and salt slicks of Warren Prairie. Photo by Michael Weatherford.

Floristic Inventory of Clifty Canyon

by 2024 Delzie Demaree Research Grant Recipient Jack Looney

Clifty Canyon contains one of the most intact mesic oak-hickory forests in the Arkansas Ozarks. Nestled in the Ozark National Forest, it features deep gorges, limestone bluffs, and spring-fed streams that run cold year-round. The streams cut into the bedrock, forming a series of box canyons. Calcareous groundwater seepage along the bluffs and terraces creates perfect microhabitats for rare species, including several Appalachian disjuncts that thrive in the cool, moist conditions. In contrast, south- and west-facing slopes host high-quality glades where drought-adapted species thrive. The upper ridges support stands of towering *Pinus echinata* (shortleaf-pine). The heterogeneity of habitats within such a concentrated area makes Clifty Canyon a true botanical hotspot.



Clifty Canyon. Photo by Jack Looney.

The canopy is dominated by massive *Quercus alba* (white oak), *Quercus rubra* (northern red oak), and *Carya* spp. (hickories). Other large trees include *Nyssa sylvatica* (black-gum), *Platanus occidentalis* (sycamore), *Ulmus* spp. (elms), *Fraxinus* spp. (ashes), *Quercus stellata* (post oak), *Quercus velutina* (black oak), and *Pinus echinata* (shortleaf-pine). The shrub layer contains *Asimina triloba* (pawpaw), *Cornus florida* (flowering dogwood), *Cercis canadensis* (eastern redbud), *Hamamelis virginiana* (witch hazel), *Chionanthus virginicus* (fringe tree), and *Cotinus obovatus* (American smoke-tree). The understory is rich with *Panax quinquefolius* (ginseng), *Arisaema triphyllum* (Jack-in-the-pulpit), *Hydrastis canadensis* (goldenseal), *Adiantum pedatum* (northern maidenhair fern), and *Polystichum acrostichoides* (Christmas fern). The understory layer is particularly striking in the spring and summer, rich with a diverse array of flowers. The forest also has a variety of *Carex* (sedges), such as *Carex gracillima*, *Carex leptalea*, *Carex timida*, *Carex laevivaginata*, and *Carex sparganioides*. Grasses like *Brachyelytrum erectum* (shatter glass grass), *Elymus riparius* (riverbank wild rye), *Panicum virgatum* (switch grass), and *Chasmanthium latifolium* (river-oats) thrive here.

Access to the canyon is challenging, requiring a long bushwhack through dense forest, with multiple stream crossings and often navigating directly through the creek. The steep terrain, ranging from about 1,000 feet at the bluff tops to 700 feet in the streambed, means there are no easy approaches. However, this difficult access helps preserve the area's remarkable botanical diversity.

During my first full field season in Clifty Canyon, I collected and pressed over 300 plant specimens, including several county records. In a shaded sandstone gorge, I found *Huperzia lucidula* (shining clubmoss) and possibly *Crepidomanes intricatum* (weft fern). *Cypripedium reginae* (showy lady's-slipper) grew along calcareous seeps on the limestone bluffs.

Lilium superbum (Turk's-cap lily) was a particularly exciting find, thriving in the moist, shaded understory. I documented *Gentiana alba* (pale gentian) along a sandy forest edge. In the glades, *Spiranthes magnicamporum* (Great Plains ladies'-tresses) and *Coreopsis grandiflora* var. *saxicola* were notable finds. Another interesting find was a mutated

Thalictrum thalictroides (rue-anemone) with multiple sets of petals, which stood out among the typical forms of the species. I collected several Appalachian disjunct species, including *Anemone quinquefolia* (wood anemone), *Veratrum hybridum* [also known as *Veratrum latifolium*] (crisped bunchflower), *Waldsteinia fragari-*



Beautifully mutated rue-anemone (*Thalictrum thalictroides*). Photo by Jack Looney.



Nodding trillium (*Trillium flexipes*). Photo by Jack Looney.

oides (barren strawberry), *Lilium superbum* (Turk's-cap lily), and *Trillium flexipes* (nodding trillium). These species, more common in the Appalachian Mountains, thrive in Clifty Canyon's cool, moist microhabitats, making the canyon a key refuge for these plants.

The ecological importance of Clifty Canyon goes beyond its plant diversity. As one of the least disturbed mesic forests in the Ozarks, it provides a crucial reference for understanding regional plant distributions and habitat conservation. The persistence of rare species in these microhabitats underscores the importance of preserving such

refuges.

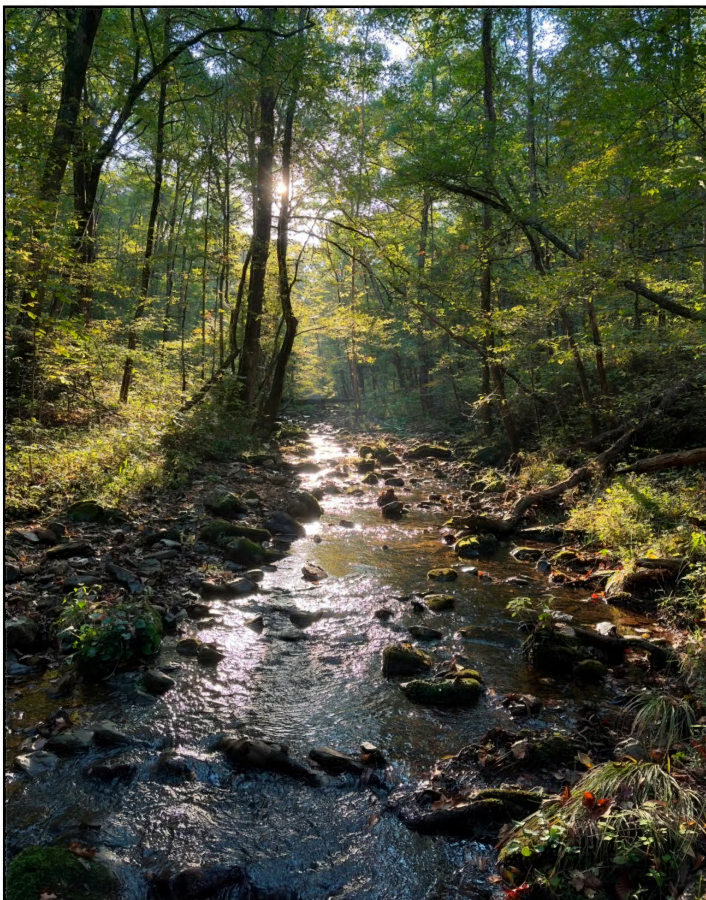
Clifty Canyon is full of wildlife. One morning, I spotted *Ursus americanus* (black bear) crossing the road. *Meleagris gallopavo* (Wild Turkeys) and *Colinus virginianus* (Northern Bobwhite) are common sights and sounds. The streams are home to crawdads and salamanders, often hiding under rocks and logs. *Agkistrodon piscivorus* (Northern cottonmouth) and *Crotalus horridus* (Timber rattlesnakes) are also found here, adding to the area's biodiversity.



Indian-paintbrush (*Castilleja coccinea*). Photo by Jack Looney.

The canyon remains a critical refuge for rare plants and wildlife, offering a glimpse into an ecosystem that has stayed largely undisturbed. In the next field season, I look forward to documenting even more plants.

I'd like to extend my gratitude to the Arkansas Native Plant Society for supporting the floristic inventory of Clifty Canyon. Their dedication to studying and conserving Arkansas's flora has been invaluable, and I'm grateful for the opportunity to contribute to understanding this unique botanical region.



Clifty Canyon. Photo by Jack Looney.



Kentucky lady's slipper Orchid (*Cypripedium parviflorum* var. *pubescens*). Photo by Jack Looney.

Notes from Smith Creek Preserve

By Samantha Heller

The weekend began with a guided group hike out at Smith Creek Preserve near Boxley, Arkansas— just a hop and a skip away from the Buffalo River— which was jointly organized by the University of Arkansas Herbarium and the Arkansas Native Plant Society.

This >1,000 acre tract of public land, managed by The Nature Conservancy, is beautiful at any time of year, but especially in the present moment, on the cusp of the growing season. Salamanders and caddisflies crawl amongst the smooth stones of the creek beneath Elise Falls, the fragrant flowers of Ozark Witch-hazel (*Hamamelis vernalis*) shrubs emanate a smell of Juicy Fruit gum at the first— currently dry— creek crossing, and...

...in a few weeks, the waterfall will light up with several hundred blossoms of Sharp-lobed Hepatica (*Hepatica acutiloba*). We were just a smidge early this year for flowers.

Several of us noted that you could already see tons of one interesting plant from the parking lot: Shagbark Hickory (*Carya ovata*). It's fitting, since Smith Creek is home to the largest population of Indiana Bats in our state. The peeling bark of Shagbark Hickory flakes so strongly against the trunks that bats will actually roost underneath them in the summer heat, neglecting to travel all the way back to caves. Only a handful of other species of trees will create this bat habitat, like an occasional White Oak (*Quercus alba*) with more-peeling-than-usual bark.



Ozark witch-hazel (*Hamamelis vernalis*). Photo by Samantha Heller.

The trail begins in a small, muddy parking lot, and descends deeply right off the bat (pun intended). It keeps rolling down and down, eventually running into a stretch where the road has such deep erosional scars that you could fall into it. Most of the path, thankfully, is flat enough, and where it does cave in, you can see it well in advance.

With great steepness comes great variability. Smith Creek Preserve sits in the Boston Mountains, being just a smidge further west than other parts of the Buffalo River



Andrew Ruegsegger inspects a American witch-hazel (*Hamamelis virginiana*). Photo by Samantha Heller.

region that are fully in the heart of the Ozark Mountains. These hills are mostly sandstone with a few slivers of the Boone Formation shale mixed in, but some sections do contain limestone, which is far more common in the Springfield Plateau directly north of them.

The change in rock substrate affects soil acidity and a host of other factors that directly influence which species of plants can grow on them— as we keep climbing down, Jennifer Ogle and Andrew Ruegsegger point out that the hike begins with species like Blue Ash (*Fraxinus quadrangulata*) that indicate calcareous, basic soils but then shift towards those that are far more tolerant of acidic soils, such as Catbriar (*Smilax glauca*) vines and blueberry shrubs (*Vaccinium* spp.) that love to grow below pine stands throughout the state. The layers of sandstone give way to acidic soil, while the limestone layers are basic and rich in calcium; as our elevation declines, we see evidence of the changing soil types.

As foreshadowing for another related species to come, Andrew pointed out a small tree of American Witch-hazel (*Hamamelis virginiana*) that leans out over the



The base of Elise Falls. Photo by Samantha Heller.

trail. Some remnants of their flowers are still holding on despite their blooming season being so long past. This species blooms at the beginning of autumn.

One of the many things that make ANPS hikes well worth going to is the constant pres-

ence of experts in the audience in addition to those who lead the trips. This day's hike was joined by Dr. Rick Noyes, a professor at UCA who teaches botany and directs the university herbarium. After relaying some interesting facts about hickories, he also pointed out that all of the American beech (*Fagus grandifolia*) trees we came across had not only various lichens growing on them, but also liverworts! I was surprised to see that they were a *Frullania* species, which are incredibly tiny, dark, and hard to see even when you're looking for them.

Blue Ash was a surprising find in its winter form. The species epithet refers to its habit of forming incredibly square branches and trunks, making it easily distinguished if you know what you're looking for. This species is much smaller than most of our other ash trees, and is thought to be somewhat resistant to the invasive Emerald Ash Borer that has decimated ash trees across North America and is currently spreading throughout Arkansas, Louisiana, and Texas. Being a smaller tree, it likes to grow on the edges of glades. As previously mentioned, it is a strong indicator of basic soils, and generally has limestone substrate beneath it.

As it turns out, you can identify some blackberries (*Rubus* sp.) even in the winter! This was news to me; the only thing I would be able to know in winter is the invasive Wineberry (*Rubus phoenicolasius*), which is a deep red and has so many spikes on it that it appears to be densely hairy at a distance. They're quite scary looking.

By contrast, one of our native brambles, the Black Raspberry (*Rubus occidentalis*) has canes that are a less saturated type of red, and have an interesting glaucousness to them. It has a distinctly uneven and mold-like look to

it. Although still spiky, these are much less intimidating than Wineberry, and are at least indigenous to the area.

Jennifer explained the distinguishing factors for this species and also told us a wholesome anecdote about Dr. Johnnie Gentry. While they were writing the *Trees, Shrubs, and Woody Vines of Arkansas* book, they chose to include one of the common names that he had made up after hitting some literal snags with a different species of *Rubus*, the Southern Dewberry (*Rubus trivialis*) that grows so low to the ground and is quite easy to trip on: An Ankle-tangle Bramble!

Shortly after that, someone spotted the first fresh flower that we saw: a White Trout-lily (*Erythronium albidum*)!

Although there is some debate over their taxonomy in Arkansas due to interbreeding and other oddities, we probably have two species, White Trout-lily and Prairie Trout-lily (*E. mesochoreum*). I can't find it at the moment, but I'm fairly certain this is the same trail that I once photographed several intermediate plants within inches of each other. One has to wonder, what's going on with them? Do we have a new species? Just an intergrade? Who knows?

The Buffalo River region at large is defined, at least in the common mind, by its marcescent American Beech understory, Jennifer stopped to point out some Sugar Maples (*Acer saccharum*) that also possess marcescent leaves, but whose range sprawls far beyond the Buffalo. They occur on basically every shady slope in the woods of my home on the far eastern edge of Benton County. Some of the other trees around still holding their leaves were members of the Birch family instead.

Morgan Russell suddenly produced a large fallen leaf of Cucumber Magnolia (*Magnolia acuminata*), handing it off to Jennifer, which has an unusual habit in our part of the state.



The vastly different twigs of Umbrella Magnolia (*Magnolia tripetala*) (left) and Cucumber Magnolia (*Magnolia acuminata*) (right). Photo by Samantha Heller.

In the more southerly regions of Arkansas, particularly towards the Ouachita Mountains, Cucumber Magnolia trees are really more of large shrubs than truly trees.

I remember seeing my mom point them out when, one summer as a child, she drove me to the Arkansas Audubon Society's Halberg Ecology Camp at Camp Clearfork, not far from Hot Springs. Down there, they are incredibly common and certainly much shorter.

Jennifer pointed out that they grow much, much taller in the Ozarks, generally reaching the height of the overall tree canopy, not the mid-story. In either form, of course, they're lovely trees. At this time of year, we could see fuzzy Magnolia buds in the sky.

Every now and then, another White Trout-lily would be in flower along the trail.

An associate of acidic soils, or at least of the Short-leaf Pine (*Pinus echinata*) trees that love to grow in them, Andrew pointed out some Catbriar (*Smilax glauca*) vines in a tangle above several shrubs. It's hard to spend much time in the Boston Mountains without running into them.

American Beech is an inevitable sight anywhere near the Buffalo River. It holds onto its leaves all winter long, and has smooth bark not dissimilar to the skin of an elephant.

One of its interesting associates is a tiny parasitic plant called Beechdrops (*Epifagus virginiana*). Completely brown in color, this plant lacks green pigments from chlorophyll and instead relies entirely on feeding off of the comparatively gigantic beech trees that they grow underneath. At a glance, they resemble mushrooms far more than they seem to look like the average plant.

Many beech trees are hollowed out yet still standing and

alive, and can provide entertainment.

After a long hike down the trail, we finally hit the smooth, bulky rocks of a dry creek.

Some of its edges had a small tangle of Ozark Witch-hazel (*Hamamelis vernalis*) shrubs growing in it; fortunately in flower even

this late in the year. Most of the time, this species flowers in late January, although it is certainly dependent on how warm the weather gets.

At this time of year, there is little to no water at the base of the creek; what is present amounts to a few small ponds of turquoise water.

A narrow path leads towards Elise Falls, and you can walk quite a ways up to the waterfall itself, where a steady but weak stream of water flows.

The moisture of the waterfall creates a sudden

shift in the plant life. Although they have not yet flowered this year, many evergreen leaves of Sharp-lobed Hepatica can be seen on the lower parts of the falls. The rocks lining the stream are lined with various mosses, including an adorable oat-like Pocket Moss (*Fissidens* sp.), and some ferns, such as Walking Fern (*Asplenium rhizophyllum*) and oddly the common Ebony Spleenwort (*Asplenium platyneuron*).

In contrast to the Cucumber Magnolia that we saw earlier in the trail, Morgan also found an Umbrella Magnolia (*Magnolia tripetala*). Although winter twig ID generally seems extraordinarily difficult for a beginner, sometimes similar species look so extraordinarily different that even a true novice could distinguish them. These two are a great example of that.

The hike back up to the parking lot was a bit brutal, with the day warming up quite a bit, but we all came out a little bit more knowledgeable and certainly with far greater enjoyment than we had at the start of the day.



Mid-hike group photo. Photo by Deb O'Donnell.

ANPS Spring Meeting

May 2-4, 2025 in Monticello, Arkansas

Everybody is welcome to attend! Meeting registration is only \$10 with no pre-registration required. Registration will begin at 5:00 PM on Friday, May 2, 2025. The meeting events wrap up on Sunday, May 4 around noon.

Date: May 2-4, 2025 in Monticello, Arkansas

Location: UAM Forestry Complex Building, Room A102

UAM School of Forest Resources

Weevil Drive, Monticello, AR 71655

Google maps link: [https://](https://maps.app.goo.gl/867bXLhNqD1fm1e67)

maps.app.goo.gl/867bXLhNqD1fm1e67

On Google, the building will appear as the UAM School of Forest Resources.

Lodging: Holiday Inn Express

146 Dearman Drive, Monticello, AR 71655

Phone: (870) 460-0100

We have 20 rooms reserved, 15 doubles and 5 kings at a rate of \$114.40 per room. Rooms will be held until April 18th. Complimentary breakfast, free WiFi, and parking is included. **To receive the group rate, you must call to make the reservation and mention you are with the Arkansas Native Plant Society.** Individuals are responsible for their own room and tax.

There are other hotels available nearby should you be unable to reserve a room at the Holiday Inn.

Dining Options: We will have a potluck meal Friday and Saturday evenings. Bring a dish or just come, eat, socialize, and learn! There are also some dining options (fast food and others) in Monticello.



Jennifer Ogle leads a trip to Columbus Prairie during the fall 2024 meeting. Photo by Virginia McDaniel.

Auction: The silent auction will begin at 6:00 PM on Friday and close at the end of the program on Saturday evening. Proceeds from the auction support the ANPS small grants program, student research grants, and student scholarships! Bring any donations you would like to include in the auction before 6:00 PM. Auction sheets



Mary Hogle and other field trippers listen as Art Browning talks about the geology of Columbus Prairie. Photo by Jennifer Ogle.

will be provided. If your item doesn't sell, you must take it back with you at the end of the meeting.

Field trips:

Field trips to local areas of top botanical interest (e.g., Warren Prairie Natural Area) will be scheduled for Saturday 8:30 AM - 5:00 PM and Sunday 8:30 AM - 12:00 PM.

You must sign up for field trips on Friday evening to allow for adequate logistical planning.

Our field trips will offer both easy and more vigorous walks. We'll be in southern AR in the spring, so we advise bringing waterproof boots/shoes, bug spray, water, and a good hat! Dr. Richard Abbott, botany professor at UAM, will also lead a workshop in Plant Identification Saturday afternoon.

For complete and up-to-date details, go to www.anps.org or contact Andrew Ruegsegger at andrewruegsegger8@gmail.com; (870) 656-9705.



*Prairie Gentian (*Gentiana puberulenta*) on Baker Prairie. Photo by Eric Hunt.*

Welcome, New ANPS Members!

New Members to ANPS since the fall issue of *Claytonia* (between 10 August 2024 and 07 March 2025)

Holly & Elaine Adams (Springdale, AR)
Hannah Anderson (Little Rock, AR)
Erika Boswell (Cabot, AR)
Sydney Bowman (Bella Vista, AR)
Chrystal Boyd (Rogers, AR)
Dr. John Bracey (Little Rock, AR)
Jerrold Butler (Bella Vista, AR)
Kristin Netterstrom Higgins (Bryant, AR)
Alexis O'Callahan (Fayetteville, AR)
Caite Mae Ramos (Fayetteville, AR)
Sally Shroyer (Taylor, AR)
Laura Thompson (Alexander, AR)
Logan Young (Judsonia, AR)

New Lifetime Members

Carlee Adams (Arkadelphia, AR)
Jackman Corley (Siloam Springs, AR)
Sonniah Hill (Ben Wheeler, TX)
Mary and Carl McDaniel (Oberlin, OH)
Veronique Odekirk (Little Rock, AR)
Rand C. Retzloff (Little Rock, AR)
Sharon Roberts (Eureka Springs, AR)
Hope Shastri (North Little Rock, AR)
Cathy M. Shonk (Newark, AR)
James N. Wise (Hot Springs, AR)



Jennifer Ogle, Sarah Geurtz, and Greg Rajskey pose in their Fronds Forever tees with the shirt's creator, artist Caite Ramos (center without green t-shirt). Photo by Samantha Heller.

SAVE THE DATE!

FALL 2025 MEETING
SEPTEMBER 19 –21
Harrison & Buffalo
National River



Old Growth and Landowner Education

By Jon Webb

A new oldest-known post oak (*Quercus stellata*) was discovered last month in Osage County, Oklahoma. At a remarkable 442 years old, this tree once resided within Arkansas Territory from 1819 to 1836. Post oak grows throughout the eastern United States and prefers dry sites, including ridges, outcrops, and steep slopes. On these xeric sites post oak regularly reaches ages of 200 to 400 years old, as confirmed time and time again by the University of Arkansas's Tree-Ring Lab Director Dave Stahle. The tree, named PGE10, is just outside of Sand Springs, Oklahoma, on a 22,000-acre private ranch owned by The Charles Page Trust and was discovered by Dave Stahle and myself as part of a project aiming to survey, identify, and provide reports on areas of old growth forests to landowners. This finding rivals the oldest known white oak (*Quercus alba*, 464 years old) in the eastern United States from Virginia.

The largest refuge of these ancient post oaks is the Cross Timbers ecoregion that spans from central Texas through Oklahoma and into southeastern Kansas, with a little spur reaching into western Arkansas. The Cross Timbers represent the ecotone between the deciduous forests of the eastern United States and the grasslands of the southern Great Plains. The Cross Timbers also form an important link in the oak archipelago that spans from Central America to southeastern Canada and provide important habitat for migrating neotropical birds among many others. Due to the transi-

tional nature of the ecoregion, the Cross Timbers are a complex mosaic of forest, woodlands, savanna, tallgrass prairie, and glades. Historically, wooded areas were limited to the steep ridges and valleys of the ecoregion, largely due to available soil moisture and fire regimes.



An ancient post oak from the Joseph H. Williams Tallgrass Prairie Preserve with physical characteristics of the oldest age class. Note the laterally twisted trunk, short stature, broken canopy, and generally gnarled form. This individual was not sampled as it was almost completely hollow, illustrating the difficulty of getting accurate age estimates out of the oldest post oaks and why PGE10 is so remarkable. This tree is very likely 300 years old or more, but we will never know. Photo by Jon Webb.

These steep ridges and valleys have protected large tracts of original, mostly undisturbed old-growth forests, with an estimated 5% of original forests remaining, compared to the less than 1% found throughout a vast majority of the eastern U.S. The extreme climate present in the upland forests of the Cross Timbers results in stunted, gnarly trees that grow too slowly for commercial lumber harvesting, and the thin, rocky, and steep soils protect the trees from being cleared for pasture. The non-commercial nature of the ecoregion has not entirely protected the forests from eradication, but rather slowed the march of urbanization, logging, and pasture conversion. A vast majority of the Cross Timbers are held privately and much of the forests are cleared for conversion to pasture, using an aerially applied broadleaf herbicide to convert these woods into rangeland for cattle and hay production. Yet the stubborn oaks persist, sprouting from robust

root stocks and creating dense, impenetrable coppice thickets that require repeated herbicide applications. The oaks fight the clearing of undisturbed old growth forests, just as we do.

Ancient trees are able to be accurately dated to the exact

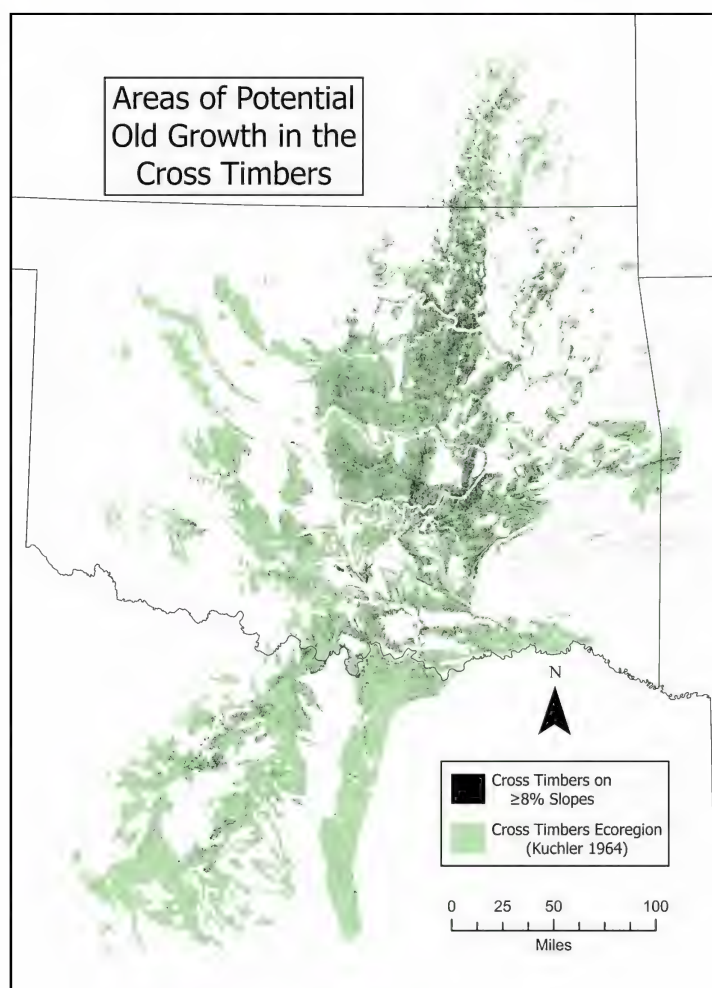


Inner rings of PGE10 formed in the late 1500s. The average ring width of PGE10 is less than half a millimeter, exhibiting the extremely slow growth of the oldest post oaks in the Cross Timbers. Most oaks sampled are less than 60cm (24in) in diameter. Photo by Jon Webb.

calendar year through tree-ring dating, or dendrochronology, this is because climate imprints recognizable and unique patterns of wide and narrow rings onto the tree's yearly growth, allowing dendrochronologists to pattern match back in time. Dendrochronological estimates are conservative and operate on the idea of minimum ages, meaning we know a tree is at least a certain age, but it could be much older. This is for two reasons. For one, many old trees experience some level of heart rot, where the center of the tree starts to rot away, losing its centermost rings, thus obscuring the true age of the tree. The other reason lies in the fact that tree cores are taken from breast height, meaning the years the tree takes to grow to that height are lost as well. We can account for this by taking samples lower on the tree, but heart rot is more or less unavoidable. In the case of PGE10, a non-destructive core sample was taken from the tree and 18.5cm of rings were able to be extracted. But this tree has a diameter of roughly 46.5cm and a radius of 23.25cm, meaning there are up to 4.75cm left between the center of the tree and the end of the core. If we do some simple interpolation based on years per centimeter on the core, the tree could have an absolutely mind-blowing age of 562-years. This is likely an overestimate, as post oaks tend to grow faster when young—wider rings towards the center of the tree could skew the average years per centimeter lower. Still, the tree is likely at least 500 years old. There are likely thousands and thousands of 450+ year-old post oaks in the Cross Timbers, but it is remarkably difficult to confirm due to heart rot. PGE10 is unique in the sense that it is very difficult to find a tree this old and be able to prove it due

to the prominence of heart rot in most post oaks of this age class.

We know that PGE10 is not alone in the 400+ year age class, because external growth characteristics of trees provide fantastic insight into the vintage of any individual tree. Old trees have a gnarl factor and generally show their age, just like old people. Heavy upper limbs, broken canopies, lateral twisting of trunks, and root collar exposure all provide important clues to the true age of a tree. PGE10 does not stand out in this sense. Although obviously very old, we have come across hundreds of similar looking trees in our studies that do not reveal their true ages to us mostly due to heart rot. This is somewhat frustrating, of course, but also poetic and inspiring. Our current times are so information-rich that the impossibil-



A predictive map of remaining areas of old growth (black) over a potential natural vegetation map by Kuchler, (1964) (green). A simple model of still forested areas on steep slopes ($\geq 8\%$) was used to model potential areas of old growth. Many areas of uncut old growth remain in the Cross Timbers due to the non-commercial nature of the stunted, twisted oaks and steep, rocky hillsides. The Cross Timbers likely hold a higher percentage of remaining old growth than any ecoregion in the eastern U.S.

(Continued from previous page)

ity of knowing the true age of these druid trees helps me slow down and appreciate the trees for what they are rather than the information they may represent. Every moment I am surrounded by these remarkable individuals is a moment I'll keep with me forever.

The Cross Timbers also represent an opportunity for conservation and education. Many see the Cross Timbers as brush—stunted, gnarly trees that pose an inconvenience instead of the remarkable natural accomplishment that they are. People like trees, and most can appreciate old trees as evidenced by a common fascination with redwoods, bristlecone pines, and bald-cypress. Most that reside in the Cross Timbers are unaware of the ancient woods growing literally in their front yards. This project aims not only to identify areas of undisturbed old-growth, but to educate landowners on the true age of their scrubby forests, and the dangers threatening the trees comprising them. There have been conservation successes in the

Cross Timbers, including the Pearl Jackson Crosstimbers Preserve, a number of wildlife management areas and state parks, and Keystone Ancient Forest (KAF). KAF es-

tablishes an important precedent, as it was once private property and was identified as potentially having old growth Cross Timbers. KAF was then visited in person, confirmed to have pristine old growth post oak and eastern red-cedar (*Juniperus virginiana*), and a report was provided to the landowner. Turns out the landowner was conservation minded, and with his generosity and the help of The Nature Conservancy and the City of Sand Springs, a nature preserve was founded with the purpose

of protection and education. As with most conservation success stories, these represent only a drop in the bucket and clearing continues to this day, which is why landowner outreach and education is one of the most important tools we have as conservationists.



A mature post oak nestled among the rugged slopes of the Cross Timbers. Most of the well preserved tracts of old-growth forests are protected by their habitat, the oldest post oaks are often among boulders on steep slopes with thin soil. Note the stunted nature of the forest, which protects these trees. Photo by UAF Tree-Ring Lab.

Fall Business Meeting Minutes

Arkansas Native Plant Society Business Meeting Minutes
October 5, 2024

University of Arkansas, Hempstead Hall
2500 South Main Street, Hope, Arkansas 71801

The Arkansas Native Plant Society (ANPS) held its Fall 2024 Business Meeting at the University of Arkansas' Hempstead Hall in Hope, Arkansas. President Eric Fuselier called the meeting to order at 6:07 p.m.

Field Trips. Eric Fuselier thanked everyone for coming to the meeting and he reminded them of the remaining field trips to be conducted the following morning. Eric reported that the Saturday morning and afternoon field trips were well received, thanking the field trip leaders for conducting the hikes and inviting them to describe highlights of those excursions.

Diana Soteropoulos summarized the outing to the Sarato-

ga Blackland Prairie Natural Area, noting that the associated calcareous woodland supported nutmeg hickory (*Carya myristiciformis*) and that the chalk/marl prairie featured three species of blazing star (*Liatris spp.*), along with *Gaillardia* and blue sage (*Salvia aurea*).

Virginia McDaniel reported that, because the Grandview Prairie site was open to hunting, it was decided to tour instead the nearby Columbus Prairie, approximately half of which had been burned a month earlier. Plant species of note included *Agalinis auriculata* and *Oenothera glaucofolia*. The afternoon walk at Millwood State Park showcased *Stachys tenuifolia* in flower and *Tripsacum dactyloides* in fruit.

Greg Rajskey noted that the tour of White Cliffs Natural Area revealed lance-leaf greenbrier (*Smilax smallii*), along with toothache tree (*Zanthoxylum clava-herculis*), bastard oak (*Quercus sinuata*), and—likely—shingle oak

(*Quercus imbricaria*).

Webinars. Eric Fuselier reminded those present that the ANPS YouTube channel features webinars covering botanical topics. He noted that the evening's featured speaker, Dr. Richard Abbott, had spoken in July on the subject of opposite-leaved woody plants and that Brendan Kosnik had presented *Experiencing Botany through the Eyes of an Arkansas Traveler*, also in July. As for future webinars, Eric reported that Ben Benton would be presenting on November 2 (*Untangling the Biotic and Abiotic Factors that Structure Prairie Pimple Mound Plant Communities*) and that Justin Thomas would be presenting on November 16 (*The Amazing World of Wild Plant-Soil Interactions*).

Election of Officers. Nominating Committee Chair Joe Ledvina reported that Leslie Patrick would be stepping down from her role as Treasurer. Members applauded her efforts and thanked her for her service. Joe introduced Samantha Heller as the nominee to fill the Treasurer's position, noting that Samantha had an accounting background in addition to her botanical expertise. Joe reported that a candidate had also been nominated to enter the presidential track: Art Browning, a retired geologist who had previously served in a board position for the Sierra Club. The following slate was presented to the members, with the nominees duly elected by unanimous assent:

Samantha Heller, Treasurer

Art Browning, Vice President

Eric Fuselier thanked Sarah Geurtz for all her work in planning and organizing the fall meeting and shared that today was her birthday. Members applauded in celebration of her birthday—and in appreciation for her efforts.

Treasurer's Report. Leslie Patrick presented the fall Treasurer's Report as included in the fall edition of the *Claytonia* newsletter, with a fund balance of \$9,366 as of August 9. She explained that expenses outpaced revenue during the past year, in large part because ANPS had been intentionally generous with grant awards and scholarships. Noting that print and distribution costs (\$2,489 for *Claytonia* and \$1,436 for the directory) make up a significant portion of ANPS expenses, she encouraged the members to accept electronic distribution of these publications rather than opting to continue to receive paper copies in the mail. Members were also encouraged to recruit others to join the organization. Leslie reported that the prior evening's auction brought in \$900 of revenue and reminded the members that ANPS merchandise is available online through Bonfire (<https://www.bonfire.com/results/>

[arkansas+native+plant+society](#)), with proceeds deposited directly into ANPS' bank account.

Withdrawal of Grant. It was noted that a year ago (September 2023) the membership had approved issuing a grant of \$1,000 to All Saints Lutheran School in Jonesboro for a native plant garden, to be issued as reimbursement for submittal of receipts for purchase of approved plant species. However, the school had not submitted receipts and apparently had not pursued the project, so it was suggested that the Society withdraw the grant. During the subsequent discussion, Karen Seale asked about donations tied explicitly to specific projects or purposes; in response it was noted that such donations are to be treated as "restricted" funds or "board-designated" funds and accounted for separately from the organization's general fund. In the past, ANPS has had to adopt additional accounting procedures to accommodate such designations. Following discussion, Susan Schulte moved to withdraw the grant award 30 days after issuing notice to that effect via email to our contact at the school. The motion was seconded by Greg Rajsky and subsequently passed.

Sundell Award. Eric Fuselier noted that the Eric and Milanne Sundell award for lifetime achievement, including a \$1,000 cash contribution, had been presented to Mary Ann King during the prior evening's program. Jackie Leatherman asked how the board had arrived at the specific dollar amount associated with the award and it was explained that the board had sought to strike a balance between making it affordable for the organization and meaningful to the recipient. Further discussion suggested that, because this is a lifetime achievement award, it would not be expected to be given on a prescribed schedule (e.g., annually), but as deserving recipients are identified. Jennifer Ogle noted that she would like to see more of our early/charter members so honored.

Budget. The Board of Directors recommended adoption of the 2025 budget as proposed by the Treasurer. Jennifer Ogle moved to adopt the budget as presented by the Board; Joe Ledvina seconded. Motion passed.

Eric Fuselier announced that, after adjourning the business meeting, there would be a short break followed by the introduction of our featured speaker, Dr. Richard Abbott. There being no further business, the meeting was adjourned at 6:41 PM.

Respectfully submitted,

Greg Rajsky, Secretary

Early Arkansas Botanists: Jessica Holleman

By Jennifer Ogle and Susan Young

As we're hot on the heels of Women's History Month, now is a good time to shine a light on Jessica Holleman, who holds the distinction of being the first woman of record to collect specimens for the University of Arkansas Herbarium (UARK).

Born in Arkansas in 1855, she was the oldest of eight children born to Harmon Holleman and Clemenza Handfield Holleman. The first record we have of Jessica is the 1860 census, where the Hollemans are found in Sebastian County. By 1870, a teen-aged Jessica and her family were living in Van Buren (Crawford County). At some point between 1870 and 1880, the Holleman family made their home in Fayetteville. Perhaps the move was precipitated by 21-year-old Jessica's enrollment in preparatory school at the Arkansas Industrial University (AIU; today's University of Arkansas) in 1876.

Jessica is listed as a student at AIU from September 1876 through June 1881. In her sophomore year of 1878–1879, she was likely a student of Francis LeRoy Harvey, AIU's professor of natural sciences and chemistry and founder of UARK. Both he and Cuthbert Powell Conrad are listed as biology instructors that year, offering botany coursework as described in the AIU catalog:

BOTANY begins with the Spring term of the Freshman year, and is continued through the first term of the Sophomore year. Classical and Engineering students do not study Botany. The first term is devoted to a consideration of the structure and uses of the organs of plants: together with analysis, classification, and study of the prominent orders of flowering plants. Students do laboratory work and prepare one hundred species of plants. The second term is devoted

to a study of the Compositae, Graminae, Cyperaceae, and other difficult orders, together with a course in Cryptogamic and Economic Botany.



Looking at a closeup of the flawless pressing work on this specimen of hairy mountain-mint (Pycnanthemum pilosum), collected by Jessica on August 16, 1878, it's no surprise she took home Professor Harvey's top botanical prize the year she was enrolled in his classes. Photo by Jennifer Ogle.

During the 1878–1879 academic year, Prof. Harvey offered “a copy of *Sach's Text Book of Botany*, valued at \$15.50, to the student who will add the largest collection of new State plants, exceeding 100 species, to the College Herbarium.” You guessed it—the winner was sophomore Jessica Holleman—who collected 150 plants from Arkansas. Clearly, she had a passion for botanizing!

In the early days of the UARK Herbarium, Prof. Harvey increased the collection's holdings by several methods. Primarily, he traveled widely within Arkansas using a free pass from the railroad, a perk enjoyed by all AIU faculty, making collecting trips to the far reaches of the state. He also purchased specimens from other institutions, a common practice of the time. But most relevant, to this article anyway, was his small, rotating army of botany students, many

of whom were women, who collected plants as part of their academic experience.

Of the 150 plants Jessica collected, we know we still have 16 of them in the herbarium. More are likely hiding in the folders of cultivated specimens, which we are still in the process of digitizing. But these 16 specimens tell at least part of Jessica's academic story. We can't say definitively if she stayed in and around Fayetteville or traveled further afield, as that information was not included in her label data. But we know that four of them were collected from cultivated plants, likely in gardens around campus and town: bleeding hearts (*Dicentra spectabilis*), poet's daffodil (*Narcissus poeticus*), catnip

(*Nepeta cataria*) around “dwellings and gardens,” and common hollyhock (*Alcea rosea*) in “old gardens.”

Ho-hum, not very exciting. But aren’t these just the types of collections you would expect from a Victorian-era female student?

If you responded with a yes, then TSK-TSK! Read on!

Jessica botanized in wild places too! She collected marginal wood fern (*Dryopteris marginalis*) on “rocky hillsides in rich woods,” ebony spleenwort (*Asplenium platyneuron*) in “rocky open woods,” purple-stem cliff-brake (*Pellaea atropurpurea*) on “dry calcareous rocks,” Christmas fern (*Polystichum acrostichoides*) in “hillsides and ravines,” and northern dewberry (*Rubus flagellaris*) in “thickets.” Think of what she must have been wearing as she traversed rocky hillsides and scrambled down into ravines — a dress with a fitted bodice and layered skirts that caught all the briars, tick-trefoil seeds, and actual ticks, and shoes not at all suited for wilderness adventures. Thinking back on all the ill-fitting, uncomfortable clothing and boots we endured during the awful ‘shrink it and pink it’ era of women’s outdoor clothing design, it’s hard to complain when you see photos of late 20th century women doing field work.

Jessica’s specimens were carefully processed, as well. Each was pressed and mounted with great care and attention to detail. Of note are her expertly pressed yellow pimpernel (*Taenidia integerrima*) and hairy mountain-mint (*Pycnanthemum pilosum*) specimens.

When one considers the common collecting tools of the day, her high-quality specimens are even more impressive. Today, botanists typically use zip-top plastic bags or thick trash bags to store plants while in the field, and we add a few drops of water to help keep plants fresh until



Jessica collected this *Polystichum acrostichoides* (Christmas fern) from “hillsides and ravines.” Photo by Jennifer Ogle.

they can be pressed. Of course, plastic bags were not a thing in the late 19th century, so Jessica likely used a metal case, called a vasculum, to store plants while in the field. This must have made it difficult to keep specimens from wilting in the field, especially on hot, summer days. UARK has several vascula in the collection, of two types: one is thick, heavy metal with sharp edges and unsightly spot welds. The other is much smaller, well crafted, and of a lightweight tin that was stamped with an abstract but decidedly feminine pattern. We asked Dr. Gary Tucker if he knew the history of UARK’s vascula, and he responded:

In late Victorian days, on into the ‘20s or so, botany was practiced by lots of female students. It was seemingly part of “finishing” for young females. Many herbaria have collections made by female students in those earlier days. I am thinking that female students of that time would possibly have been provided with a smaller light-weight vasculum. Purely conjecture on my part!



UARK’s two styles of vascula on display in the herbarium. The vasculum on the right is smaller, lighter, and was more carefully crafted than the heavy, clunky vasculum on the left. We don’t know the history of either of these collecting boxes, but they were likely used for many decades by UARK’s professional and student botanists before they began their current life as historical herbarium curiosities. Photo by Jennifer Ogle.

(Continued from previous page)

He also shared [this article](#) about women in science and the role a vasculum served to aid in their work. We agree with Dr. Tucker; it seems reasonable to think that a smaller, lighter vasculum would have been used by UARK's women collectors.

What became of Jessica Holleman? Well, she didn't finish college. In 1881 she married John Holleman. (Yep, same last name. We haven't figured out if John and Jessica were related.) They moved to Stilwell, IT (Indian Territory; present-day Oklahoma), where John enjoyed successful careers as a mechanic, blacksmith, miller, carpenter, and sewing machine salesman. Jessica found her calling in the work of Stilwell's First Christian Church, where she served as Sunday School superintendent, president of the Aid Society, and member of the church council. She and John raised three nephews and two nieces.

Jessica Holleman died in 1939; John had passed away three years earlier, in 1936. Both are buried in Fayetteville's Evergreen Cemetery. "Evergreen" strikes us as a lovely and appropriately named final resting place for Jessica Holleman—someone who had their day in the sun as a prize-winning collector of herbarium specimens.

Two unidentified 19th Century botanists heading into the field, with their slim, lightweight vascula in tow. Photo from [19thcenturyladynaturalist.blogspot.com](#).



National Forests: Sources for Native Seed

By Jennifer Ogle and Maribeth Latvis

Native seed is essential for restoring degraded areas across the southeast, but a lack of availability of locally adapted native seed is a limiting factor. The Ouachita and Ozark-St. Francis National Forests and the University of Arkansas Herbarium (UARK) are working to address this issue in parts of Arkansas through a project funded by the Bipartisan Infrastructure Law (BIL).

The Ouachita and Ozark-St. Francis National Forests encompass much of the Ouachita Mountains and Boston Mountains ecoregions in Arkansas. Both forests have successful woodland restoration programs that use fire and thinning to promote the growth of native plants. Thus, both have large swaths of land with significant populations of native species that will provide genetically diverse seed for both ecoregions.

This project is part of a larger program involving government agencies and nonprofit organizations in Arkansas. The Arkansas Native Seed Coalition (ANSC) is working to

facilitate the availability of genetically appropriate, ecoregion-specific native seed for large-scale habitat restoration and enhancement projects throughout the state.

Since establishing the ANSC in 2016, partners have made progress toward developing a native seed industry in Arkansas, following guidance from the National Seed Strategy and incorporating actions from other major national and state initiatives, including the Northern Bobwhite Conservation Initiative, the Monarch Butterfly Conservation Initiative, the Department of the Interior Secretarial Order 13112 on invasive species, and the Arkansas Monarch and Pollinator Conservation Plan.

Program accomplishments to date include 1) developing seed transfer zones for the state, 2) assessing the demand for native seed, 3) creating a target species list, and 4) determining genetic research needs. One partner, Audubon Delta, is working with Arkansas farmers to

grow and harvest seed collected from remnant grasslands within four ecoregions through their Audubon NATIVE Project.

For this most recent BIL funded program, the Ozark-St. Francis and Ouachita National Forests have entered into an agreement with UARK to begin the process of collecting seed. First, UARK staff worked with Forest Service employee Virginia McDaniel to develop a list of 20 desirable understory species from the ANSC Target Species List that occur within both forests and could be used in upland oak-pine woodland restorations in the Ouachita Mountains and Boston Mountains ecoregions.

Next, UARK hired two students, ANPS award recipient and President-Elect Andrew Ruegsegger and ANPS award recipient Jack Looney, as field technicians. They are in the process of identifying and documenting 10-20 populations of each of the target species. When they find a population with at least 50 individuals, they map the population, collect a voucher specimen for deposit at UARK, and collect leaf material that will be used to assess genetic compatibility of seeds and inform seed mixing strategies.

Many widespread “workhorse” plant species commonly used for restoration are known to have infraspecific variation in base chromosome number (or infraspecific ploidy variation; IPV). Plants with different ploidy levels are generally not compatible, and so if seed of such plants are combined, the result could be low seed set. Thus, a critical step of this program is to test the compatibility of seed collected from within and between populations located by UARK’s field staff. Plants with different ploidy levels can still be used by farmers to increase seed, but they should not be mixed together before planting.

UARK staff will also develop a program for seed collection, processing, and storage of seed collected on the Ouachita and Ozark-St. Francis National Forests. They will work in coordination with staff at the Mount Ida Seed Orchard, Ouachita and Ozark-St. Francis National Forest,



Restored short-leaf pine woodland with a rich herbaceous understory on the Ouachita National Forest. Photo by Virginia McDaniel.

and Southern Research Station to begin collecting seed from identified populations and prepare seed for storage. Seed will ultimately be used by the ANSC to develop ecoregion-specific seed mixes for the Ouachita Mountain and Boston Mountain ecoregions and will be used to restore degraded areas on National Forest lands and elsewhere.

Having a reliable supply of seeds adapted to local conditions will inform a variety of seed mixing strategies to enhance both genetic variability and adaptive potential in the face of projected climate changes. To have ready seed mixes will be a game changer in terms of increasing the success of re-seeding projects.

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OCANPS News

by Sue Hubbard



Burnetta Hinterthuer at Harmony Mountain, fall 2024. Photo by OCANPS member.

Burnetta Hinterthuer was a founder of the Ozark Chapter of the Arkansas Native Plant Society. She has served as President and more recently, Newsletter Editor. She has also been the chief botanist and field trip leader for the entire time our chapter has been in existence. She stepped down as Newsletter Editor at our retreat at Harmony Mountain this past fall.

Long time member and current Vice President, Sandy Tedder, had this to say about Burnetta:

Burnetta has always gone to the top and way beyond in the hours she has given to OCANPS. Her energy and dedication have always been outstanding. I wish we knew the count for both the hours she has put in and the number of field trips she has led. I personally have learned so much from Bur both in meetings and in the field. I am also thankful for all the good times we have enjoyed together!

Thank you Burnetta. Even though you are no longer an officer we look forward to seeing you on our field trips and hanging out with you at Harmony Mountain.

Harmony Mountain Retreat 2024

OCANPS held its Harmony Mountain Retreat November 8-10. It rained on and off throughout the weekend. However, this did not impede our ability to feast on great food, make music, play games, and enjoy each others company. Many of the participants managed to dodge the rain and make trips to hike to 2 different waterfalls. On Saturday we went to Hudson Shelter Falls and on Sunday it was to Fern Falls. Others explored the neighborhood around the cabin.

The big news is that Burnetta announced her decision to step down as Newsletter Editor. Cat

Donnell was elected as the new Secretary/Newsletter Editor. All other officers were re-elected to the positions they currently held.

The auction and some additional donations collected during the weekend totaled \$760. It was not determined where to donate this money during the weekend, but a poll of those who did attend conducted by email shortly afterwards decided to give \$450 to the Halberg Ecology Camp, \$425 to the ANPS botany scholarship fund and \$125 to the Writers Colony in Eureka Springs for their native plant project.



OCANPS members hanging out. Photo by OCANPS member.



OCANPS members at Fern Falls. Photo by OCANPS member.

Member Spotlight: Brent Baker

Brent Baker is a long-time member of ANPS, former ANPS President, former state botanist, and extraordinary ANPS field trip leader. I caught up with him on a stormy day in April.

How did you become interested in plants?

I'd say it was inherited. I had a lot of family members that were into plants whether they were house plants, flower gardens, or vegetable gardens. I started my own house plant collection with starts from my mother's plants when I was a small child. I had an outdoorsy family, so I was always outside around plants and in nature. As a kid, I would also dig up and transplant random plants on our property to my little "garden" area (a tiny section of the field behind our house I commandeered and encircled with rocks). I didn't even know what most of those plants were at the time. I've just always had a fascination with plants for as long as I can remember.

How did you become involved with the ANPS?

I took Plant Taxonomy my sophomore year in college at the University of Central Arkansas under Dr. Donald Culwell, who is a founding member of ANPS. So, I first learned about it through him but didn't get involved right away. After I graduated with my bachelor's, I started working for MaryAnn King at the native plant nursery Pine Ridge Gardens and she happened to be president of ANPS at that time, so of course she made sure I went to the next meeting! And the rest is history.

What is your favorite ANPS memory?

Whew, I'm starting to get a lot of years piling up...lots of memories. I guess for an early one: We were at a meeting up at Heber Springs just my second or third year in the Society. I was still a grad student. I was having dinner with Dr. Culwell, who had become my mentor and already like a second father, before the Saturday evening meeting when I was approached and asked to accept nomination to be an ANPS officer and go through the presidential track. I was floored. I thought: "Are you serious? I'm just a student." And I still felt so new to the Society. I was extremely overwhelmed and honored but very apprehen-

sive. After some encouragement from Dr. Culwell, I accepted, and I will always remember the look of pride on his face.

Do you have a favorite plant?

I don't like that question. I have been asked that question more times than I could count, but it feels kind of like asking someone: "Who's your favorite child?"

Do you have a favorite place in Arkansas?

I guess I have two favorite places. My property at Dardanelle is one. It's a beautiful location and I love living and now working there. Plus, I have cherished childhood memories of helping my grandparents on the farm, and of playing in and exploring the woods, creeks, and fields (which I suppose I'm still doing!). I also love the Ouachita Mountains, where I spent a lot of vacations growing up, but have really developed an affinity for the Cossatot River area, specifically, as an adult. There are a lot of spectacular natural areas in Arkansas, many of which are more widely known and visited, but the Cossatot area is a stunning gem. Of course, I'm also biased because of the family connection to the area, some of my ancestors having settled there in the early 1800s. Baker Creek, Baker Springs, Baker Crossing, and Baker community being a few of their legacies.

What are you doing with native plants now?

Like I said, I've always been a plant person so one of my earliest childhood career dreams was having a nursery. Of course, at the time I didn't know anything about native plants. After being trained as a field botanist, being involved with Arkansas Vascular Flora Project, and serving as a botanist with the Arkansas Natural Heritage Commission for 12 years, the opportunity arose to purchase the native plant nursery Pine Ridge Gardens from MaryAnn King and finally fulfill that childhood dream. It just seemed like fate and the perfect fit because I love growing plants and have developed a great appreciation for native plants and conservation through my education and career. It's an honor to carry on MaryAnn's legacy of growing and providing Arkansas and regional native plants.



Brent Baker (in black coat) leads a tour on Cherokee Prairie in 2013. Photo by Bruno Hanke.

Master Naturalists Revive Land with Native Seeds

by Larry Price

The need to revegetate abandoned areas with locally sourced native plants is every present. The resources to do the work is where our local master naturalist organizations come up big. The Foothills Arkansas Master Naturalists (FAMN) worked with the US Army Corps of Engineers to seed an abandoned baseball field at both the US Army Corps of Engineers (Corps) Russellville Old Post Park.

Arkansas Master Naturalist President Reed Green informed us of the project that Cherrie-Lee Phillip, a Conservation Biologist for the Corps, Little Rock District was working. She had applied for a grant through the National Environmental Education Foundation to support a “shovel-ready pollinator enhancement project on America’s public lands”.

We (FAMN members) were well equipped to take on this project after getting experience with Project Wingspan in 2020—2021, an effort by Pollinator Partnerships to train volunteers in plant ID, proper seed collection techniques, and seed cleaning. We used this knowledge to collect seeds for a 1.7-acre site at Camp Robinson Special Use Area (CRSUA) with the Arkansas Game and Fish Commission (AGFC). We collected approximately 70 species for that project with about 70% coming from AGFC property and most of the remainder from Arkansas Department of Transit Rights-of-way (AR-DOT ROW) up and down the River Valley.

The area at Old Post Park was an 8,100 ft² baseball diamond and 14,000 ft² infield. The total size of the project was initially 3 acres, but Corps field crew decided to enlarge it to 6 acres to allow it to cover all the grass space

within the area and avoid “the chance for unwanted invasive plants to enter.” We would need approximately 7.5 million seeds (250,000 square feet at 30 seeds/square foot). A project of this size was going to tax us, but we were up for the challenge.



Seed cleaning event at Robert’s house. Photo by FAMN member.

Our seeds for this project came from AGFC’s CRSUA, TNC’s Kirsch Preserve, Central Arkansas Water Properties, the Price meadows, and AR-DOT ROWs. Cherrie-Lee Phillip purchased some seeds from the Arkansas NATIVE Project through Roundstone Native Seed Nursery and some butterfly and common milkweed seeds from Roundstone. Additionally, Pope County Master Gardeners brought some seed from their native plant garden at Reflection Point in Washburn Park and Sid Vogelpohl collected several species of seed from his Know Your Natives (KYN) Garden. Many of us worked many hours collecting, drying, cleaning and storing seeds. Some were organized seed collection events, but many of us were out there collecting alone any time circumstances permitted. We were able to collectively obtain 95 species.

The primary goal of the collection was to provide a pollinator meadow with at least 3 locally collected species blooming at any one time from mid-May to early November. We felt local seed would make the longevity of the project much more likely. We wanted more locally collected milkweed species than we were able to provide. I had expected a good crop of Green Milkweed (*Asclepias viridis*) on our Price meadows, but it was not a good year for that species. We did get a moderate amount of local ecotype Butterfly Weed (*Asclepias tuberosa*) seed for the project. The majority of our milkweed seed was purchased from Roundstone Native Seed.



Foothills Arkansas Master Naturalists collect seed at Camp Robinson Special Use Area. Photo by FAMN member.

Initially, Cherrie-Lee Phillip was wary about planting any grass seeds. She felt they might become competitive with the wildflowers. I encouraged her to consider a small amount of grass seed, around 5% by weight. This would provide structure for birds and small mammals and host plants for many species. It would also provide fuel for fire, as pure stands of wildflowers are very difficult to burn. She was ultimately agreeable to this and we collected 12 species of native grasses, including Big Bluestem (*Andropogon gerardi*), Little Bluestem (*Schizachyrium scoparium*), Split-Beard Bluestem (*Andropogon ternarius*) and Indian Grass (*Sorghastrum nutans*). We avoided Switch grass (*Panicum virgatum*) because of its potential to grow aggressively on the silty soil.

Because of these localized collections, we were able to obtain seed of species you do not often see in commercial seed mixes including: Naked-stem Sunflower (*Helianthus occidentalis*) from plants on the Price property whose seeds were collected from AR-DOT ROW several

years ago; Illinois Bundleflower (*Desmanthus illinoensis*) from TNC's Kirsch Preserve; Sampson's-snakeroot (*Orbexilum pedunculatum*) one of our more astute FAMN members found in a ditch north of Conway; Narrowleaf Obedient Plant (*Physostegia angustifolia*) from a large colony growing on the Price property; Hairy Blazing-star (*Liatris hirsuta*) from Sid Vogelpohl's KYN Garden; Barbara's Buttons (*Marshallia caespitosa*) from Cen AR Water; Yellow-flower Beebalm (*Monarda luteola*) from a colony resulting from a plant purchased through an ANPS plant sale many years ago; and American Bluehearts (*Buchnera americana*) from CRSUA.

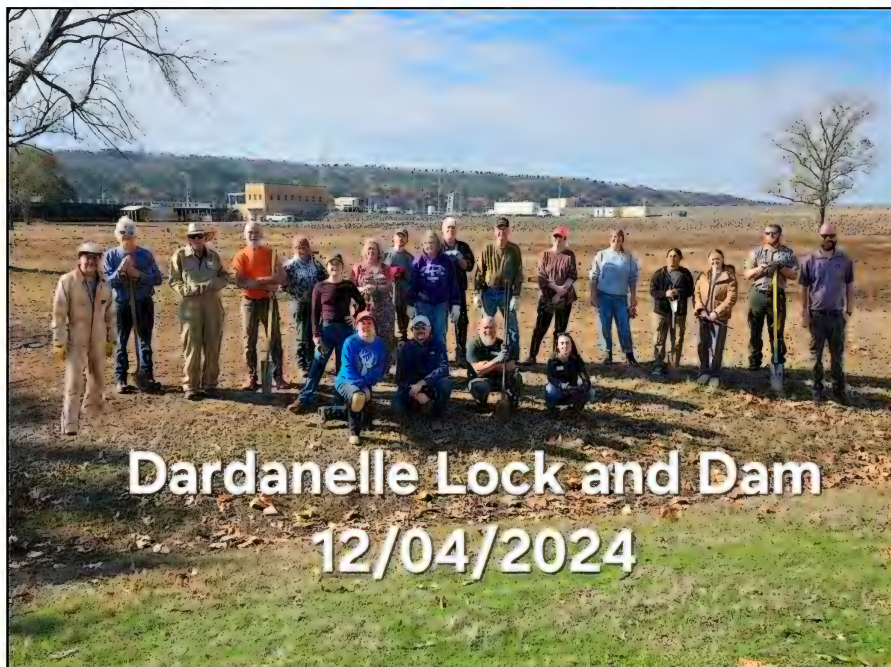
The Corps used glyphosate with a surfactant in a tank sprayer twice during the active growing season; then once more in the fall, as enough rainfall finally had fallen to encourage a major germination of winter annuals. This was generally quite effective except for the persistent Bermuda over the septic field lines. Corps personnel burned off all the dead plant material that would burn

the day before planting. We planted the area in December 2024.

We used three chain-type drag harrows on the early AM of planting day to prepare the seedbed. We dumped all our seeds (except for the baseball diamond) into a large pile on concrete in the Corps equipment shop, stirred them with shovels and dumped them into bags. AGFC was very helpful with this project and brought a pendulum spreader that was permanently mounted on a UTV. The bags of seed were added one at a time. The machine was calibrated, and the seeds were dispersed.

For the extended baseball diamond area, we had a special seed mix for sandy soils. This

was dispersed by manually throwing out a moist sand-seed mix. The septic field was covered with the seed mix through the pendulum spreader. We decided to plant about 150 Jerusalem Artichokes (tubers) in the field. It is not a tap-rooted plant (all its roots but the tubers die back each year), but it does prefer more moisture and fertility.



Planting crew at Dardanelle Lock and Dam. Photo by FAMN member.

We had grown approximately 300 plants for the project, most of them representing species for which we had collected seeds. These were in pot sizes of one quart to 3 gallons. This was the real on-site work. Fortunately, we had many volunteers from FAMN, CAMN and Pope County Master Gardeners (they also provided help collecting seeds on the Price property). We had a volunteer from Friends of Mount Nebo State Park, as well. We had 19 volunteers and 3 Corps employees planting potted plants that afternoon. Pope County Cooperative Extension Agent Brandon Yarbery worked all day.

I was over there the week of April 4th and germination looks very good. I saw multiple specimens of Beebalm (*Monarda fistulosa*), Gumweed (*Grindelia lanceolata*), Sunflowers (*Helianthus* spp.), and others. The potted plants have popped up and most of those should bloom. It looks like it will be as successful as our project at Camp Robinson that was planted in 2021.

Spring Field Trips

Wildflower Hike at Lake Wilson, Fayetteville

Saturday, April 19th—8:00-11:00 AM

Leader: Andrew Ruegsegger (870-656-9705)

Directions: Lake Wilson can be reached from Fayetteville by turning south off of 15th St onto Morningside Dr. Follow this road for about 1.8 mi before turning left onto Wilson Hollow Rd. This can be followed all the way to Lake Wilson (do not turn right when reaching a fork in the dirt road). There will be two parking lots. When you first arrive at the lake, you'll have the option of turning left to park at a dirt lot used for launching boats. If you continue forward you'll reach another parking lot near a pavilion. We'll meet there by the pavilion. The early meet time is because the pavilion parking lot will likely fill up later in the morning.

Andrew Ruegsegger of the UARK Herbarium and President-Elect of the Arkansas Native Plant Society will lead this field trip to take in the spring-flowering plants at Lake Wilson, a 320-acre park owned by the City of Fayetteville and previously used as Lafayette's main water supply before Beaver Lake was dammed in the 1960s. We should see a good number of spring wildflowers in flower, such as beaked trout lily, wild indigo, mayapple, and some different kinds of violets. We should also see plenty of our native trees in flower, like black locust and redbud.

Level of difficulty: Easy, a fairly level trail about 2 miles long.

Rob and Melani Walton Preserve, Garfield

Thursday, May 8th—10:00 A.M.

Leader: Ginny Masullo

Directions: From Hwy 62 in Garfield turn south on Hwy 127. Cross the railroad tracks and travel 0.6 miles. Turn left onto Ford Road and travel a short distance. When Ford Road makes a turn to the left continue straight through the rock pillar gate into the preserve parking lot.

Ginny Masullo and The Nature Conservancy (TNC) staff will lead this trip. In 1974 this area was listed as a priority for conservation in the Arkansas Natural Area Plan, which helps guide efforts to preserve our state's native landscapes, plants, and animals. The dozens of known rare plants in the area make conserving this property important. TNC staff will share information on habitat improvement efforts including reclaiming 12 acres of pollinator habitat from invasive blackberries and how we use prescribed fire and other management tools to improve

the land for wildlife and water quality. The hike will be approximately 2 miles and include an easy stroll along mowed paths through grassland habitat and a moderate stroll along a gravel access road through the forest that has a moderate incline in some sections. Along the way we will observe a variety of flowering species that are in bloom which we will work together to identify.

Arkansas River Valley Field Trip: Bona Dea Trails & Sanctuary – Washburn Park Trailhead (Russellville) and Pine Ridge Gardens (Dardanelle)

Saturday, May 24th—10:00 A.M.

Leader: Brent Baker (479-970-9143)

Directions: Meet in Russellville at the Bona Dea Trailhead at Washburn Park (On Lake Front Dr. near the intersection of Lake Front Dr./W. Parkway Dr./Hwy 64/W. Main St. Please note that this is the western trailhead, NOT the one closest to I-40 Exit 81...input 'Washburn Park' into your GPS rather than 'Bona Dea'.)

Join Brent for a leisurely stroll along gentle paved trails through bottomland woods and wetlands at Bona Dea Trails & Sanctuary adjacent to Lake Dardanelle. We'll also check out Reflection Point, a Pope County Master Gardener project at Washburn Park, which incorporates numerous native plants into the planting. Bring a sack lunch and we'll have a quick bite to eat at the park before heading to Dardanelle. After lunch, we'll caravan to the new home of Pine Ridge Gardens native plant nursery at 10989 Fulton Rd., south of Dardanelle. Brent will give a quick tour of the new nursery facilities and then you'll be free to browse the native plant inventory and head back to Northwest Arkansas when you're ready.

Wildflower & Woodland Restoration—Ouachita National Forest, Waldron

Wednesday, May 28th—10:00 A.M.-2:00 P.M.

Leaders: Virginia McDaniel (828-545-2062) and Jennifer Ogle. Please RSVP to Virginia.

Directions: Meet at the USDA Forest Service office in Waldron, at the junction of Hwy 71 & 248 (address: 1541 Hwy 248W, Waldron, AR). We will carpool from here to the woodlands.

Join Virginia McDaniel, Forestry Technician with the U.S. Forest Service, and Jennifer Ogle, botanist and Collections Manager at the UARK Herbarium, for a tour of the Pine-

Bluestem Woodland Restoration area on the Ouachita National Forest. We will see a variety of grassland species including little bluestem, panic grasses, sunflowers, wild petunias, coneflowers, and milkweeds. Bring water and snacks/lunch, and wear sturdy boots.

Level of Difficulty: Easy to moderate; we will primarily be walking off-trail through an open shortleaf pine woodland with a carpet of mostly native forbs and grasses in the understory.

Baker Prairie Natural Area, Harrison
Saturday, May 31st—9:30-11:30 A.M.

Leader: Jennifer Ogle (jogle@uark.edu) and Deb O'Donnell

Directions: Follow U.S. Highway 65 through Harrison. At the intersection of Highway 65, Highway 65B (North Main), and Industrial Park Road, head west on Industrial Park Road and follow for 0.9 mi., then turn left on Goblin Drive. Continue for 0.2 mi. then turn left on W. Burls Way and park in the Harrison Middle School parking lot.

Meeting Location: We'll gather at the pavilion on the eastern portion of the prairie, just north of the Harrison Middle School parking lot near the intersection of Goblin Dr. and W. Burls Way. Link to google maps <https://maps.app.goo.gl/JBjJDfOMThsnr1UA>

Join Jennifer Ogle, botanist and collections manager at the University of Arkansas Herbarium (UARK), and Deb O'Donnell, amateur botanist and UARK volunteer, for a tour of Baker Prairie Natural Area, a high-quality chert prairie remnant managed by the Arkansas Natural Heritage Commission and The Nature Conservancy. During the walk we expect to see an abundance of native wildflowers, including green-eyes, winecups, Carolina larkspur, pale purple coneflower, goat's-rue, and Ohio spiderwort, to name just a few. We'll also see and hear many birds, so bring binoculars if you have them!

Level of Difficulty: Easy to moderate; we will primarily be walking on a mowed path through the prairie, in full sun. Water, sun protection, and sturdy shoes are strongly recommended.

2025 Spring Treasurer's Report

2025 Spring Treasurer's Report					
			2025 through 6 March Cash, 1 January 2025 → \$ 12,117.12		Proposed 2026 Budget
	2024 Actual	2025 Budget	2025 Actual (as of 6 March)	Σ	
Income					
Membership Dues	\$5,720.00	\$4,500.00	\$610.00		\$4,500.00
Meeting Registration	\$2,222.56	\$1,500.00	-		\$1,500.00
Silent Auction	\$1,116.00	\$1,000.00	-		\$1,000.00
Merchandise Sales	\$435.00	\$1,000.00	-		\$1,000.00
Contributions & Grants	\$2,254.94	\$2,000.00	\$16.10		\$2,000.00
	<u>\$11,748.50</u>	<u>\$10,000.00</u>	<u>\$626.10</u> →	\$626.10	<u>\$10,000.00</u>
Expenditures					
ANPS.Org	\$99.00	\$190.00	-		\$99.00
Bulk Mail*	\$320.00	\$320.00	\$350.00		-
Claytonia	\$2,448.85	\$2,400.00	-		\$200.00
Directory	\$1,435.61	\$1,500.00	-		-
Memorial Awards, Grants, and Scholarships	\$10,500.00	\$10,000.00	-		\$8,000.00
Garden Grants	\$1,007.85	\$1,000.00	-		\$1,000.00
Meeting Expenses	\$1,430.18	\$1,000.00	-		\$1,000.00
Tabling Events	-	-	-		-
Webinar Series	\$159.90	\$163.00	-		\$163.00
Merchandise Purchases	-	\$500.00	-		\$500.00
Supplies (Postage, PayPal fees, Etc.)	\$271.50	\$300.00	\$30.85		\$300.00
	<u>\$17,672.89</u>	<u>\$17,373.00</u>	<u>\$380.85</u> →	\$380.85	<u>\$11,262.00</u>
			Cash, 6 March 2025 → \$12,362.37		

*This fee is in the process of being refunded by USPS, as ANPS will no longer be mailing Claytonia in bulk quantities.

Respectfully submitted by Samantha Heller, Treasurer

President's Message



Sarah Geurtz, ANPS President.

I believe it was Lance Reynald who wrote, "True friends stay with you no matter the distance or time that separates you from them."

I know it can't just be me who feels a strong bond between our ANPS members. Some of us are in touch between meetings and some are not—but

when we get together twice a year, I feel such happiness to see my friends again! We all have much in common and those similarities bring us together regardless of age or where we live.

I'm therefore, like always, truly looking forward to seeing each and every one of you at the Spring meeting. All of you are kind and intelligent and so interesting! Good company, a plant auction, speakers who will teach us interesting new things, and good food!

Andrew Ruegsegger is our new president-elect and has done a wonderful job planning our Spring ANPS meeting in Monticello and the speakers he has lined up are going to be great! Art Browning is now our vice president and he is already applying his energetic self to learning the ropes.

As you know, Leslie Patrick did a wonderful job as our treasurer and has now handed the torch to Samantha Heller. Samantha is already doing a very thorough job—her accounting background makes her perfect for the position!

Thank you to all the board members who selflessly donate their time—AND thank you to all the members who make our close-knit ANPS group successful and feel like family.

Warmly,

Sarah Geurtz

ANPS President



ANPS group at Columbus Prairie during the Fall 2024 meeting.
Photo by Virginia McDaniel.

Arkansas Native Plant Society Membership Application

Membership Categories

- ☐ \$10 Student
- ☐ \$15 Individual
- ☐ \$20 Supporting
- ☐ \$25 Family
- ☐ \$30 Contributing
- ☐ \$150 Lifetime (age 55+)
- ☐ \$300 Lifetime (under age 55)

- ☐ New Member
- ☐ Renewal
- ☐ Address Change

☐ Opt in to receive paper *Claytonia*

Name(s) _____

Address _____

City _____ State _____ Zip _____

Phone _____ Email _____

Mail this completed form with a check made payable to the Arkansas Native Plant Society to:

Samantha Heller, Treasurer
8461 Apple Glen
Rogers, Arkansas 72756

JOIN OR RENEW ONLINE INSTEAD! Details at anps.org/join.



CLAYTONIA

Virginia McDaniel | Editor
virginiamcd31@yahoo.com

Please don't forget to renew your membership!

The calendar year is the membership year.

To renew your membership, fill out the application for membership on page 24 and mail it to the address on the form.

Or renew online at anps.org/join.

POETRY CORNER

When I am among the trees

by Mary Oliver

When I am among the trees,
especially the willows and the honey locust
equally the beech, the oaks and the pines,
they give off such hints of gladness.
I would almost say that they save me, and daily.
I am so distant from the hope of myself,
in which I have goodness, and discernment,
and never hurry through the world
but walk slowly, and bow often.
Around me the trees stir in their leaves
and call out, "Stay awhile."
The light flows from their branches.
And they call again, "It's simple," they say,
"and you too have come
into the world to do this, to go easy, to be filled
with light, and to shine."



*Rich hardwood forest along Walnut Creek on the Ouachita National Forest.
Photo by Eric Hunt.*

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Speak Up For Public Lands

by Theo Witsell

Reprinted, with additional photos, from the Arkansas Wildlife Federation's excellent magazine *Arkansas Out of Doors* (www.arwild.org/magazine/)



This natural salt lick is one of hundreds of special spots I've found on public lands in Arkansas. It's tucked deep within the South Fourche Botanical Area, a one-of-a-kind scientific interest area I helped preserve along a high-gradient stretch of the South Fourche LaFave River in the Ouachita National Forest. Other high value habitats there include riverscour barrens, cliffs, glades, groundwater seeps, old-growth woodlands, mature forests, and "the hanging oxbow," an ancient channel scar wetland complex stranded on an old terrace 60 feet above the modern-day river.

That's my son Daniel, 10 years old at the time, on a character-building adventure with his dad that wouldn't have been possible without this public land. We fished the river, hunted for reptiles and amphibians, and hiked for miles overland, navigating with a map and compass in the mid-summer heat to explore several special areas, including the salt lick.

(Continued from previous page)

It's a special spot for sure – a natural opening maintained by the licking, trampling, and wallowing of wildlife. There are no human-built roads in or out, just ancient animal trails, ancestral highways that have led herds of large mammals to the lick for millennia. Excavated more than a foot deep, the salty clay banks are licked smooth, and the deepest spots are filled with brackish, mineral-rich water. Today, the muddy bottom is stamped solid with deer tracks, but if we had visited in 1800 we would no doubt have also seen the prints of bison and elk.

Public lands are ours as Americans. They are there for us to discover and explore... to take our kids and grandkids to for a taste of wild nature and adventure. They give us a place to push our personal boundaries and test ourselves, to center ourselves spiritually, and to connect with our past. Recently, proposals have been put forth to roll back protections on public lands, and even divest of them entirely. It's time to show up for public lands or risk losing these wildlife-sustaining places we know and love. Please speak up about how much you value our public lands as permanently protected refuges for people and nature.



Daniel and I atop the cliff, feeling the current of warm air blowing from the vent on a winter's day. Photo by Bryan Rupar.



"The Devil's Chimney," another one-of-a-kind special spot I found while hunting rare plants in the Ouachita National Forest. This high sandstone cliff along the Alum Fork of the Saline River has a thermal vent in the top that blows a strong current of warm air. Photo by Theo Witsell.



*The cliff face is one of just a handful of sites in the Ouachitas for Fee's Lipfern (*Myriopteris gracilis*), which grows without soil from cracks in the rock. Photo by Theo Witsell.*



These ponds in old channel scars on a high terrace of the Alum Fork of the Saline River support many rare plant species. Ouachita National Forest. Photo by Theo Witsell.



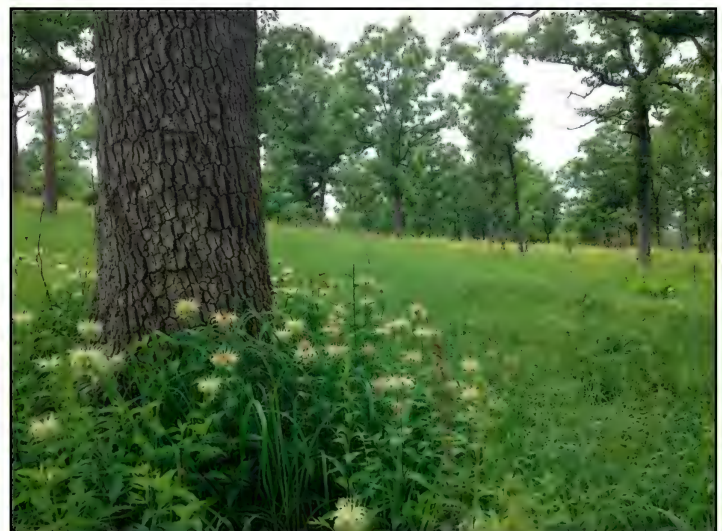
Large clumps of the globally rare Cypress-knee Sedge (*Carex decomposita*) growing on stumps in an ancient mountaintop depression pond in the East Fork Wilderness, Ozark National Forest. Photo by Theo Witsell.



Creeping St. John's Wort (*Hypericum adpressum*) in the Alum Fork Ponds. This species is rare throughout its range and is the rarest St. John's Wort in Arkansas. Photo by John Pelton.



Interior Highlands endemic Ouachita Bluestar (*Amsonia hubrichtii*) in a riverscour barrens on the Irons Fork of the Ouachita River, Ouachita National Forest. Photo by Theo Witsell.



Globally rare Yellow Bee-balm (*Monarda luteola*) in an old-growth oak savanna at Fort Chaffee. Photo by Theo Witsell.

(Continued from previous page)



The South Fourche LaFave River in the South Fourche Botanical Area, a hotspot for rare plant species. Note the steep sandstone glades (right) and band of riverscours barrens (center above river bank). Photo by Theo Witsell.



Three other unique natural communities in “the hanging oxbow” (top to bottom): willow oak-peatmoss flatwoods, overcup oak-shoreline sedge flatwoods, and a buttonbush slough. All of these communities, and many of the plant species they support, are exceptionally rare in the Ouachita Mountains and likely represent relicts from the ancient past. Photos by Theo Witsell.



Daniel with a large, old Loblolly Pine (*Pinus taeda*) in a rare mountain channel scar flatwoods in “the hanging oxbow,” an ancient wetland complex 60 feet above the modern day river. This site, in the South Fourche Botanical Area, has many species typically found in the Gulf Coastal Plain that are rare in the Ouachita Mountains. Photo by Theo Witsell.

Theo Witsell is co-founder and Chief Conservation Officer for the [Southeastern Grasslands Institute](#), a program of Austin Peay State University. He lives in Little Rock.

Grant and Scholarship Recipients

These students, Joshua Poland, Paul Akpejeluh, and Soraya Byrdsong, follow a long line of esteemed students of botany who have also received the Delzie Demaree Research Grant and/or the Aileen McWilliam Scholarship. This funding helped keep them solvent through school and launch their careers. Previous recipients have gone on to do a number of things

including: Deputy Director of the Natural Heritage Commission, Vice Provost for a university, State Botanists, Deputy Director of Conservation for The Nature Conservancy, native plant nursery owner, collections manager for the largest herbarium in Arkansas, professors of botany, botanist for NatureServe, and an Urban Forester, to name a few careers. But more importantly, this funding helped these students learn more about our natural world and in so doing helped us understand more too! I would like to thank all the members of the Arkansas Native Plant Society who pay their dues, who contribute to our annual live and silent auctions, who buy things from the auctions and all who make this organization a wonderful place to be. Your money helps us help others and your knowledge and positive energy keep us coming back for more. - Virginia



Joshua Poland
Arkansas State University
Delzie Demaree Research Grant
\$1250



Soraya Byrdsong
Arkansas State University
Aileen McWilliam Scholarship
\$500



Paul Akpejeluh
University of Arkansas
Aileen McWilliam Scholarship
\$750



Diana Soteropolous (left) was one of at least 4 recipients to become a state botanist. She is now a botanist for NatureServe. Photo by Joe Ledvina.

Teachings of Plants at Warren Prairie Natural Area

by Virginia McDaniel

There is something about an open grassland with oak (*Quercus* sp.) and shortleaf pine (*Pinus echinata*) silhouetted against the backdrop of a deep blue sky and some happy clouds. A sense of peace. You can breathe. You can feel that good things are happening here. And humans are partly responsible. Humans can do good!



Looking out at the pine flatwoods and woodlands of Warren Prairie Natural Area. Photo by Virginia McDaniel.

Warren Prairie Natural Area is gem co-managed by the Arkansas Natural Heritage Commission, The Nature Conservancy (TNC), and the Arkansas Game and Fish Commission. All three organizations work to protect, as the ANHC website says, “the last remaining vestiges of the state’s natural communities.” This 6,267 acre natural area was added to the system in 1983. Before that time the land was managed like much of southeastern Arkansas: for timber production. My father-in-law went to the University of Arkansas at Monticello, about a half hour away in from Warren Prairie. He said they ripped and planted the site with pine trees multiple times, only to have the trees succumb to drought due to the thin, rocky soils. This went on for decades. Foresters are persistent.

But the natural world more than a resource for humans, as Robin Wall Kimmerer teaches us in her book *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants*. Nature has a lot to teach us, if we will only listen. Kimmerer is a member of the Citizen Potawatomi Nation, and in the hierarchy of things in her culture, plants are at the top. After all, they have been

here much longer than humans and have a lot to teach us. Humans are referred to as “the younger brothers of creation.” Plants, animals and ecosystems can teach us about resilience, generosity, balance and interconnectedness. Humans are part of the system, not separate from it.

With this wisdom from the plants, we learned that trees aren’t meant to grow everywhere. Some places better support smaller statured plant species. Think about geocarpon (*Geocarpon minimum*), a tiny, endangered plant that grows in salt slicks, soils too thin and salty for most plants. Think about Texas sunnybells (*Schoenolirion wrightii*), violets (*Viola* spp.), and little bluestem (*Schizachyrium scoparium*) that need open systems managed with fire. Think about the forest structure needed by the Red-cockaded Woodpecker (*Picoides borealis*), a once endangered species that has recently been downgraded to threatened due to fire and forestry management by humans across the southeastern US. Over the last 40 years, Warren Prairie has been managed with thinning, mulching and fire, and the results were on display for us.

Decades of proper management were evident as trip leaders TNC terrestrial ecologist Melanie Rudolf and Forest Service botanist Virginia McDaniel set off for the afternoon walk. We walked through sand post oak (*Quercus margaretta*), past a farkleberry (*Vaccinium arboreum*) in full bloom and I had just finished admiring a group of wild onions (*Allium canadense*) in flower when I realized Melanie and most of the group were out of sight.



Chewing on the nice granny smith apple flavor of sweetleaf (*Symplocos tinctoria*). Photo by Virginia McDaniel.

I heard from the morning group that the leaders of that walk, Melanie and ANHC botanist Ben Benton, walked at a breakneck pace, and they weren't kidding! My group of stragglers took time to chew on sweetleaf (*Symplocos tinctoria*) leaves, admire lanceleaf water willow (*Justicia ovata* var. *lanceolata*) and Oklahoma sedge (*Carex oklahomensis*), and take in the open barrens. When we finally caught up to Melanie, she was hunched over a tiny plant. Emily Hart, a first time ANPS meeting attendee, was crouched down beside her. As Melanie explained what a sundew (*Drosera brevifolia*) was, I didn't need to hear a word she said; Chase's expression said it all [author's interpretation] "OMG!!!! The sticky hairs catch and digest insects!!! That's the most insane/coolest thing I've heard in years!"



The afternoon group attending the Warren Prairie Natural Area plant walk found some shade for a group selfie. Camera positioned by Virginia McDaniel.



Melanie Rudolf explains to Chase Hart how the sticky hairs on a sundew (*Drosera brevifolia*) trap insects and digest them. Photo by Virginia McDaniel.

Our next find was special indeed. Small in stature (about 6 inches tall), alternate, lanceolate green leaves with white flowers in the axils. Melanie and I were both stumped. We had never seen this plant before! The internet was bad and so we couldn't look it up. And the apps aren't so good with rare plants. In perusing the species list we found a couple plants we didn't know and ultimately decided that it was silky dwarf morning-glory

(*Evolvulus sericeus*), a tracked species found in wet flatwoods and seepages mostly in the coastal plain of southeastern US. The kicker: It hadn't been seen at Warren Prairie in 30 years!!! This does not mean the silky dwarf morning-glory has not been here for 30 years. It's the tree falling in the woods making a sound or not scenario. If a plant exists, and no botanist sees it, does it still exist? Ah, yes! It's all about creating the right conditions for a wide variety of plants and other organisms and letting them do their thing. Sometimes we get the honor of meeting them and learning something new.



Sundew (*Drosera brevifolia*). Photo by Eric Hunt.

ANPS Fall Meeting

Sept 19-21, 2025 in Harrison, Arkansas

Meeting details

Everybody is welcome to attend! Meeting registration is only \$10 with no pre-registration required. Registration will begin at 5:00 PM on Friday, September 19, 2025. The meeting events wrap up on Sunday, September 21 at around noon.

Location: Signature Tower (part of Signature Bank), Community Room
303 N Main St Suite 100
Harrison, AR 72602
Google maps link: <https://maps.app.goo.gl/JQygRna6cKL9Evxe8>

On Google, the building will appear as Signature Bank of Arkansas OR Signature Tower. It is the same building.

Lodging: 1929 Hotel Seville
302 N Main St, Harrison, AR 72601
Phone: (870) 741 2321
Website: <https://www.1929hotelseville.com/>
[Click here to book a room at our discounted rate!](#)

We have 25 rooms reserved of several sizes and rates. Rooms will be held through the end of September 4th, at which point our discount expires. Free WiFi and parking is included with a small grab-and-go breakfast option. Follow the link above to book your room at our discounted rate (first-come, first-served). Individuals are responsible for their own room and tax.

Other hotels are available nearby should you be unable to reserve a room at the 1929 Hotel Seville.

Dining Options: We will have a potluck meal Friday and Saturday evenings. Bring a dish or just come, eat, socialize, and learn! Alcohol is welcome, but **please avoid bringing glass bottles**. There are other dining options (fast food and others) in Harrison, and a bar/restaurant is located inside the 1929 Hotel Seville.

Auctions: The **silent auction** will begin at 6:00 PM on Friday and close at the end of the program on Saturday evening, and our **live auction** will begin at 7:00 PM on Friday and end later that evening. Proceeds from the auctions support the ANPS small grants program, student research grants, and

student scholarships! Bring any native-plant themed donations you would like to include in the auctions before 6:00 PM Friday. Living plants will be included in the live auction, and any other items will be included in the silent auction. Auction sheets will be provided. ***If your item does not sell, you must take it back with you at the end of the meeting.***

Award Presentation: The Eric and Milanne Sundell Award will be presented to Burnetta Hinterthuer on Friday evening before the live auction.

Field trips: Field trips to local areas of top botanical interest (e.g., Baker Prairie, Round Top Mountain) will be scheduled for Saturday 8:30 AM - 5:00 PM and Sunday 8:30 AM - 12:00 PM. You must sign up for field trips on Friday evening to allow for adequate logistical planning. Our field trips will offer both easy and more vigorous walks. We advise bringing hiking boots/shoes, bug spray, water, and a good hat!

Speaker: Justin Thomas, a botanist from Missouri and co-founder of the [Institute of Botanical Training](#) and [NatureCITE](#), will give a presentation on interesting stories associated with several Arkansas plants with a healthy splash of natural history at 7:00 PM on Saturday, September 20.

More information: For complete and up-to-date details, go to www.anps.org or contact Andrew Ruegsegger at andrewruegsegger8@gmail.com; (870) 656-9705.



*Theo Witsell shows the group wild bean (*Phaseolus polystachios*) at Lorange Creek Natural Area during the Spring 2025 Meeting. Photo by Jennifer Ogle.*

Welcome, New ANPS Members!

New Members to ANPS since the spring issue of Claytonia (between 07 March 2025 and 07 August 2025)

Kevin Balawejder (Russellville, AR)
Donna Bonjour (Foreman, AR)
Elita Caple (Oark, AR)
Alisha Eisele (Fayetteville, AR)
Collin Galloway (Little Rock, AR)
Anne Greenwood (Hot Springs, AR)
Andy Henry (Little Rock, AR)
Brenda & Colin Hester (Paragould, AR)
Olivia Hollifield (Little Rock, AR)
Paula Koch (Eureka Springs, AR)
Jenni Martsof (Morrilton, AR)
Lynn Pride (Lonsdale, AR)
Cindy Rimkus (Huntsville, AR)
Lindy Streit (North Little Rock, AR)
Linda Watkins (Vandervoort, AR)
Jon Webb (Fayetteville, AR)

New Life Members

Joseph Ledvina (Little Rock, AR)
Carol Paulson (Melbourne, AR)
Scott Simon (Fayetteville, AR)
Douglas Zollner (Little Rock, AR)



Come learn plants with us!!! Photo by Jennifer Ogle.

SAVE THE DATE!

SPRING 2026 MEETING

MAY 15 –17

Jonesboro, AR



Tulip-tree
(*Liriodendron tulipifera*)

Photo by Eric Hunt

Lorance Creek with Eric Sundell

by Samantha Heller

For the conclusive field trip of the ANPS Spring 2025 Meeting, Lorance Creek Natural Area was the site of choice. Attendees split into two groups, with one following Dr. Eric Sundell on a hike towards the main boardwalk, progressing through the seepy creek until its course slowly turned into a slow-moving cypress swamp.

One of the first plants he pointed out to us was Sweetleaf (*Symplocos tinctoria*), a shrub that is our only member of the family Symplocaceae. Its leaves are slightly sweet when chewed, hence the name, and more interestingly, this plant can be identified (or at least distinguished) through a “spit test”: leaves contain a yellow resin, which, when

chewed on and spat back out, is yellow instead of the usual black color of other similar plants. Several people tried the test and did find a slight yellow tint to what came out. He also showed us a couple of other common woodland species, at least in the coastal plain, which were further down the trail, including Red-ring Milkweed (*Asclepias variegata*), Partridgeberry (*Mitchella repens*), American Beautyberry (*Callicarpa americana*), and the thorny Devil’s Walking-stick (*Aralia spinosa*).

As we went further into the woods and closer to the creek, we began to see moisture-loving plant species like White Azalea (*Rhododendron viscosum*). Where there was standing water, we found Bladder Sedge (*Carex intumescens*), which is far cuter than its common name implies, and Dr. Sundell pointed out the first stands of a monocot with massive and regal leaves: Green Arrow Arum (*Peltandra virginica*). That was about the point

where we had to start looking carefully before stepping anywhere, lest someone accidentally kick over a crawdad chimney or, worse, stumble upon a cotton mouth. Luckily, the only critters we stumbled upon were a flighty Prothonotary Warbler and a recently deceased giant salamander (*Amphiuma* sp.).



Eric Sundell shows the group the twin flowers of Partridgeberry (*Mitchella repens*) on the trail at Lorance Creek Natural Area. The flowers fuse and form one fruit with two crowns. Photo by Samantha Heller.

Out on the boardwalk, the swamp was lit up with all sorts of flowers, mostly in shades of white and cream: some Stiff Dogwood (*Cornus foemina*) here and there, usually with Ebony Jewelwing damselflies resting between their flowers; the tiny white blooms of Big-leaf Snowbell (*Styrax grandifolius*) more

commonly, and then the giant, black cherry-like racemes of Virginia Sweetspire (*Itea virginica*) were absolutely everywhere. The latter species often grew nestled between the buttress-like trunks of the cypress trees, and their flowers were constantly bobbing up and down, not from wind, but instead from the weight of bumblebees as they landed and circled the inflorescence for nectar.

Dr. Sundell introduced us to a number of swamp trees that might’ve otherwise blended in with the Baldcypress (*Taxodium distichum*) that were just about everywhere. One of them was Swamp Tupelo (*Nyssa biflora*), which also has a buttress structure at the base of its trunk, much like the cypress. He explained that it was once considered simply a variety, and not a separate species, from Black Gum (*N. sylvatica*), despite how different the trunk, leaves, and habitat requirements are. Modern genetic work has split them into two unique entities. The other



Eric Sundell showing the group an interesting plant. Photo by Samantha Heller.

tree of interest was the similarly named Water Tupelo (*N. aquatica*), which has irregularly toothed leaves and a much broader base of the trunk. To the untrained eye, these would blend in with the cypress, at least until you looked upward at the leaves.

As for shrubbier species, he also showed us Bog Raisin (*Viburnum nudum*) and He-Huckleberry (*Lyonia ligustrina*). The latter species gets its name from having typical

blueberry flowers, since it is in the blueberry family, but then having hard, inedible fruit; if you were to find the flowers and come back a few months later hoping for a sweet treat, you would be totally out of luck! Despite not being snackable, it's still an interesting species of the state's more southerly wetlands.



The irregularly toothed leaves of water tupelo (*Nyssa aquatica*). Photo by Samantha Heller.



Giant, black cherry-like racemes of Virginia sweetspire (*Itea virginica*). Photo by Samantha Heller.

Spring Business Meeting Minutes

May 3, 2025

University of Arkansas, School of Forest Resources
Weevil Drive, Monticello, Arkansas 71655

The Arkansas Native Plant Society (ANPS) held its Spring 2025 Business Meeting at the UAM Forestry Complex Building in Monticello, Arkansas. President Sarah Geurtz called the meeting to order at 6:06 p.m. She thanked all the members of the Board of Directors individually for their contributions to the Society. She also thanked the university for accommodating the meeting and the field trip leaders for their generous expertise.

Approval of Minutes. The minutes of the ANPS Business Meeting held October 5, 2024 had been published in the Spring 2025 edition of the Claytonia newsletter. Greg Rajskey moved to accept the minutes as presented; Joe Ledvina seconded; motion carried.

Treasurer's Report. Samantha Heller presented the statement of financial position as of March 6, 2025, reflecting a fund balance of \$12,362.37; she shared additional details of recent revenues and expenses. There were no questions

Donation and Award. Sarah announced that ANPS had received a gift of \$5,000 from the Arkansas Community Foundation in recognition of Eric Sundell and in memory of Milanne Sundell. She further noted that Burnetta HINTERthuer had been notified that she would be the next recipient of the Eric and Milanne Sundell Award; Burnetta gratefully acknowledged that she would be present at ANPS' Fall 2025 Meeting to accept the award.

Ozark Chapter Report. Sue Hubbard, representing the ANPS Ozark Chapter, reported that two field trips had been held by the chapter earlier in the spring; she reminded those present to visit the Ozark Chapter pages of the ANPS website for announcements of future events.

Field Trips. Sarah Geurtz thanked everyone for coming to the meeting and invited everyone to attend the Sunday morning field trip to Lorange Creek Natural Area. She noted that the Saturday morning and afternoon field trips had been well received, thanking the field trip leaders for conducting the hikes and inviting them to describe highlights of those excursions.

- Warren Prairie Natural Area, a sandy-saline environment, featured such distinctive species as sand post oak (*Quercus margaretiae*), green milkweed (*Asclepias viridis*), carnivorous sundew (*Drosera brevifolia*), and the rare silver dwarf morning-glory

(*Evolvulus sericeus*).

- At Cut-Off Creek Ravines Natural Area, visitors saw swamp chestnut oak (*Quercus michauxii*), lizard's tail (*Saururus cernuus*), purple milkweed (*Asclepias purpurascens*), and Canada milkvetch (*Astragalus canadensis*), along with many wetland species.
- The afternoon Plant Identification Workshop was led by Professor Richard Abbott and featured a wide range of species to illustrate an array of plant-identification features.

Election of Officers. The Nominating Committee put forth the slate of officers for re-election to additional two-year terms:

- Jennifer Ogle, Memorial Awards Officer
- Virginia McDaniel, Editor
- Molly Robinson, Membership Officer.

Sarah Geurtz presented each candidate individually. Greg Rajskey moved to re-elect Jennifer; seconded by Rosalie Overby; motion carried. Isaac Ogle moved to re-elect Virginia; seconded by Morgan Russell; motion carried. Isaac Ogle moved to re-elect Molly; Andrew Ruegsegger seconded; motion carried. Sarah thanked the candidates.

Native Plant Month. Sarah reported that the Governor had approved the recommendation to designate May as Arkansas Native Plant Month. Efforts were under way to publicize the status.

Proposed Change to Bylaws. Sarah reported that the Board had approved a series of minor updates to the Bylaws, renaming the Memorial Awards Officer/Committee (removing the word, "Memorial"), clarifying officer and committee roles and functions, and naming the types of available awards with greater specificity: Awards, Student Research Grants, and Student Scholarships. She asked that the membership vote to ratify the board's decision to approve these changes. Art Browning moved to do so; seconded by Andrew Ruegsegger; motion passed.

Website and Directory. Molly Robinson and Joe Ledvina described their ongoing efforts to research prospective improvements to the website and alternatives to publishing the member directory. As a result, no printed membership directory would be published in 2025. They reported that they had found a membership management system that would operate through an upgraded ANPS website, including automatic dues reminders and mem-



Group attending Eric Sundell and Theo Witsell's plant walk at Lorange Creek Natural Area, April 2025. Photo by Jennifer Ogle.

bers-only access to an online membership directory that would support direct member-to-member communications. Financial transactions between members and ANPS would be conducted primarily online. It was expected that a new system could be in place during the coming year.

Student Grants and Awards. Sarah reported that the Memorial Awards Committee had received several applications for grants and scholarships; the committee had vetted these applications and presented their recommendations to the Board, along with the applications. The Board had considered these at the April 24 meeting and determined to grant the following awards, asking the general membership to ratify that action.

- Joshua Poland (Arkansas State University, Jonesboro): Delzie Demaree Research Grant of \$1,250 to support research into soil-microbe influences on the dispersal of invasive plant species;
- Paul Akpejelu (University of Arkansas, Fayetteville): Aileen McWilliam Scholarship of \$750 to support statistical modeling research into the spread of invasive cogongrass (*Imperata cylindrica*);
- Soraya Byrdson (Arkansas State University, Jonesboro): Aileen McWilliam Scholarship of \$500 to support her doctoral studies.

Art Browning moved to approve these awards as recommended by the Board; seconded by Andrew Ruegsegger; motion carried.

Small Grant. Sarah noted further that a grant application had been received from Bernice Gardens (a community garden in Little Rock) requesting \$3,000 to restore and

enhance the garden. The Board determined that the request exceeded the Society's means and decided to respond by asking the applicant to reduce the amount requested and resubmit. Margaret Morrell moved to approve the Board's decision; seconded by Andrew Ruegsegger; motion carried.

Know Your Natives. Sarah reported that work continued on making the full archive of the Know Your Natives articles available to ANPS members.

Volunteer Requests. The Plum Bayou Research Station had shared a call for volunteers to assist with maintenance of their resource garden (a native plant garden that exhibits plant resources that were used when the site was occupied between AD650 to AD1050). Blandy Experimental Farm and the State Arboretum of Virginia had issued a request for seed representing local genotypes to grow in their arboretum; volunteers were welcome to contribute.

Bonfire. Sarah reminded the members that ANPS merchandise is available online through the Bonfire site and noted that the Bonfire search function can be quirky: she recommended typing the full name of the Arkansas Native Plant Society (rather than simply ANPS).

Fall Meeting. It was announced that the ANPS Fall Meeting would be held in Harrison over the weekend of September 19-21, 2025.

Adjourn. There being no further business, the meeting was adjourned at 6:37 PM.

Respectfully submitted,
Gregory T. Rajskey (Secretary)

Women in Fire

by Melanie Rudolf

On the morning of June 1st, four women left the shop of The Nature Conservancy (TNC) field office in Little Rock to head for the loess hills of western Iowa. Loaded with fire retardant Nomex clothing, rakes, drip torches, and weather kits, we began our journey to Trailblazers, a weeklong prescribed fire workshop hosted by TNC at Broken Kettle Grasslands Preserve. The workshop centers around empowering female fire practitioners by creating a safe, supportive environment for women to learn and mentor each other. The workshop hosted over 40 women and non-binary folks this year, and was attended by a large range of individuals, from students, to state conservation staff, to conservation volunteers. In a male-dominated field, Trailblazers offers something unique.

We arrived late in the evening on June 1st and set up tents, ready for the week ahead. The first two days were focused on getting people their entry level prescribed fire qualifications and training in first aid, weather, basic fire ecology, radio communication, and tools used on a fire line. On the third day of the workshop, women were split into squads to go apply live fire. For some women, this was their first time on a fire. They worked alongside other women with decades of experience.

As we left for our different burn units throughout the rolling loess hills, there was an electric charge in the air. Some squads were burning gorgeous remnant tallgrass prairie, full of bluestems (*Schizachyrium scoparium* and *Andropogon gerardi*), lead plant (*Amorpha canescens*), breadroot (*Pediomelum esculentum*), large-flowered beardtongue (*Penstemon grandiflorus*), and western snowberry (*Symphoricarpos occidentalis*), while others were burning prairie restoration sites full of the dreaded sweet brome (*Bromus inermis*). The goal was clear: put good fire on the ground while creating leadership and learning opportunities for the broad range of skillsets present.

We ended up burning 335 acres of prairie in the two days of live fire during the workshop. When talking to the women towards the end of the week, there were smiles all around. I loved hearing one of the women describe how she had served as a burn boss trainee (the position in charge of overseeing the burn) and had never seen herself as having a leadership position in fire.

For myself, the week challenged me to step further into positions of leadership, providing knowledge and direction to those with less experience, and exchanging

knowledge with those with greater experience. It pushed me to dive deeper into the fire world, a world which I had previously stayed comfortably on the edge of.

Fire.

The Global Fire Assessment estimates that 53% of the world's ecosystems are fire-dependent—defined ecosystems “where most of the species have evolved in the presence of fire, and where fire is an essential process for conserving biodiversity” (Shlisky et al. 2007). Arkansas is situated



Melanie serving as the squad boss, directing the ignition. Photo by Casey Struecker (TNC).

between the Eastern Deciduous Forest and the Great Plains, creating conditions to support a unique combination of ecosystems within this ecotone. Many of our natural communities require fire, from the shortleaf pine and post oak woodlands in the Ouachita Mountains, to the Blackland Prairies in southwest Arkansas. Many of our drier ecosystems are fire-dependent, requiring fire to maintain the structure and composition of the biotic community. In these systems, fire reduces leaf litter and duff, exposes soil for seed germination, affects the carbon and nitrogen availability to plants, reduces shrub and tree encroachment in prairies and glades, and reduces tree and shrub density in our open woodlands. Without fire, these fire-dependent ecosystems become shaded and depauperate, with understories composed of more common shade tolerant species such as Virginia creeper (*Parthenocissus quinquefolia*), poison ivy (*Toxicodendron radicans*), and a thick midstory of sweet



Wrapping up ignition with some fun and interesting topography in the loess hills in Iowa. Photo by Melanie Rudolf (TNC).

gum (*Liquidambar styraciflua*) and winged elm (*Ulmus alata*). We need our fire-dependent ecosystems to have intact fire regimes to maintain our highly diverse landscape.

To meet this challenge, we need future fire practitioners.

As ecosystems of the world are impacted through the building of our human worlds, so are they changed by shifts to ecosystem processes. Fire is a process that has been at odds with human growth and development, as we don't want our homes damaged or our crops burnt. While fire was part of the landscape historically, it was suppressed across the United States as Europeans moved throughout North America. We now know that suppressing fire creates problems (both socially and ecologically) and we must restore fire to ecosystems that depend on it. Over the past 40 or more years, dedicated people have worked to return fire to the landscapes of Arkansas, with the intent of reducing wildfire risk to communities and increasing biodiversity in our fire-dependent ecosystems. The return of fire to places where humans live means that a highly skilled workforce is needed to apply this fire. To have both ecological and community benefits, we need prescribed fire to be applied in a safe and ecologically informed manner. Safety for the people performing the fire, safety for the human

communities surrounding these unique ecosystems, and the perspective to read what fire is needed to support ecosystem resiliency and diversity.

People across the country have been rising to this challenge of growing the future of the fire workforce. The historically male-dominated field is becoming increasingly diverse due to the efforts of individuals and organizations. Trailblazers is one of those efforts, crafted to increase the diversity and resiliency of the workforce to tackle the challenge of restoring ecological fire regimes. When growing future fire leaders, opportunities for individuals to see fire as a real career are invaluable.

From my perspective, Trailblazers was perspective shifting. It is rare to have a group with such varied skillsets all learning together. For some participants, this was their first time on a fire. For others, they

had decades of experience. I was able to see myself in a leadership role, modeled by the women who walked before me. Women lighting side by side, walking over the rolling hills, decked out in their Nomex yellow shirts and green pants was a beautiful sight to see. As we think about the future of fire, I will celebrate and appreciate events that bring more perspectives to the field. We will need everyone putting their heads together to continue bringing good ecological fire to Arkansas and beyond.



Fire maintain pine-oak woodland on the Caddo-Womble Ranger District of the Ouachita National Forest. Photo by Virginia McDaniel.

Celebrating 150 Years of Botanical Exploration at the UARK Herbarium

by Maribeth Latvis and Jennifer Ogle

This year marks an important milestone in Arkansas botany: the 150th anniversary of the establishment of the University of Arkansas Herbarium! Located in Fayetteville at the University of Arkansas, UARK is the oldest and largest herbarium in the state and supports the research, teaching, and extension missions of the U of A while serving as an important resource for state and federal agencies (e.g. ANHC, USFS).

Our holdings from northwestern Arkansas, including from the Ozark and Ouachita National Forests, are significant assets that set us apart from other herbaria. These ranges are some of the oldest mountains in North America and represent biodiversity hotspots within the United States, including several endemic plant species. As such, UARK includes 65 type specimens and contributions from several notable collectors, including Francis L. Harvey, Delzie Demaree, Dwight M. Moore, John T. Buchholz, and Hugh H. Iltis, among others.

As a record of plant biodiversity through space and time, the research utility of these collections extends beyond identification and taxonomy. For example, we can use them to understand how species ranges and phenology (e.g. emergence or flowering time) may shift through time, document species invasions, and as a source of genetic material for molecular research. Beyond botanical research, our collections have also inspired students and professors in numerous other disciplines, in addition to members of the public of all ages—for example, UARK has ongoing collaborations with local artists, historians, and anthropologists who are interested in the artistic

beauty and cultural significance of our collections.

Our holdings are the result of all the collectors who have come before us, and this proud botanical legacy and passion for exploration now spans 150 years! UARK is now in the midst of an uptick in plant collection and specimen-

based research. The past two years have been a period of exciting growth for UARK, as we welcomed new staff, volunteers, post-docs, and students. We currently support numerous specimen-based research projects and are adding to our collections through exciting field expeditions in Brazil, Italy, and locally in Arkansas!

To better serve students at the University of Arkansas, we have added three new courses to our botanical curriculum:

Plant Science (10301L, 10303): This course covers basic plant structure, growth, development, physiology, genetics, ecology, and a brief survey of plant groups. (Instructor: Latvis)

Taxonomy of Flowering

Plants (41074, 51074): This course covers the identification, evolutionary history, nomenclature, and classification of the most common plant families in Arkansas. Graduate credit satisfies requirements for federal placement. (Instructor: Latvis)

Dendrology (41174, 51174): This course focuses on the morphology, classification, geographic distribution, and ecology of woody plants in the southeast, with a primary focus on Arkansas. (Instructor: Ogle)

In collaboration with the School of Art, UARK is part of



PhD student Jenna Miladin (center) providing a tour of the UARK herbarium during an art-in-collections public outreach event earlier this year. Photo by Maribeth Latvis.

the Prairie Pedagogy Research Group, an interdisciplinary group of artists, educators, scientists, Indigenous knowledge holders, and sustainability professionals interested in learning from, creating with, conserving, and restoring the Oak Knoll, a small remnant prairie and oak savanna adjacent to Cato Springs Research Center on the University of Arkansas campus in Fayetteville. Spearheaded by Jean Schmitt MFA, assistant professor in School of Art at the U of A, the group designs curricula to allow students to experience the grassland as a “megadiverse ecosystem that connects not only natural systems, but also researchers, sustainability professionals, and caretakers.” UARK has co-developed educational activities, including herbarium tours to introduce specimens as a medium to convey time, history, culture, and form, field trips to the Oak Knoll, guest lectures, and educational print materials about the grassland.

Join Us for the Celebration!

In celebration of the past, present, and future of the University of Arkansas Herbarium, we are planning several events scheduled for **early November 2025**. These will include a research symposium, family-friendly events, and a party in Fayetteville. If you are interested in joining us for these festivities, please stay tuned for a list of scheduled events (likely early Fall, as our planning progresses). We will post the event to the [UARK Herbarium's website](https://www.uarkherbarium.org/) and on our social media channels (@uarkherbarium). We hope you will make plans to join us!



University of Arkansas School of Art students in Caite Ramos' Form and Space class draw inspiration from herbarium specimens. Photo by Jennifer Ogle.



Students in Taxonomy of Flowering Plants conducting a biodiversity survey at Mill Branch Park in Goshen, Arkansas. Photo by Maribeth Latvis.

DON'T FORGET ABOUT ANPS MERCH!

Mugs, T-shirts, and sweatshirts.

<https://www.bonfire.com/>
(Search Arkansas Native Plant Society)



OCANPS News

by Sue Hubbard



Morgan Russell and Samantha Heller (right) look for spring flowers on the trail toward Steel Creek. Photo by Sue Hubbard.

Our first field trip of the season was on Saturday, March 22. We met at the Ponca Low Water Bridge and our leaders, Samantha Heller (ANPS Treasurer) and Morgan Russell (graduate student at the U of A), led us up the trail towards Steel Creek. The 12 people on the trip got to enjoy a beautiful spring day and, although we did not make it to Steel Creek, we enjoyed many spring wildflowers. They included Ozark Trillium (*Trillium ozarkanum*), Cleft Phlox (*Phlox bifida*), Spring Beauty (*Claytonia virginica*), Toothwort (*Cardamine concatenata*), Spicebush (*Lindera benzoin*), Common Violet (*Viola sororia*), both White and Yellow Trout Lilies (*Erythronium albidum* and *E. rostratum*) and Dutchman's Britches



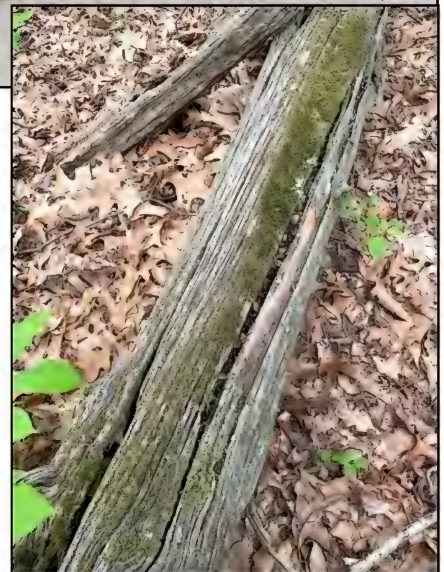
Morgan Russell (right) shows the group a plant on the trail to Steel Creek. Photo by Sue Hubbard.

(*Dicentra cucullaria*).

Dr. Fred Paillet, adjunct professor at the University of Arkansas, had agreed to lead a walk focusing on Ozark Chinquapin (*Castanea ozarkensis*) on Saturday, April 5, but it was cancelled due to a storm. As we approached the rescheduled date of Saturday, April 26, the weather was also iffy. It was good we decided to go ahead, as the rain held off for our field trip and 13 people attended. We met at the Bear Hollow Trailhead, which is part of the Back 40 trail system in Bella Vista. Dr. Paillet started by showing us specimens of Chinquapin wood and spoke about the effect Chestnut Blight (*Cryphonectria parasiti-*



Above: Fred Paillet talks about Ozark Chinquapin. Right: Ozark Chinquapin log. Photos by Sue Hubbard.



ca) has had on Chinquapins in this area. He then took us on the trail to see areas where Chinquapins were resprouting. We even found nut casings with seeds

from last year. We then drove a short distance down the road and re-entered the woods to see several logs from Chinquapins that were still recognizable despite, in all likelihood, having lain there since the 1950's. Along the way we stopped to appreciate spring wildflowers such as a large display of Wild Hyacinth (*Camassia scilloides*),

Fire pink (*Silene virginica*), Bird's Foot and Common violet (*Viola pedata* and *V. sororia*), Rue anemone (*Thalictrum thalictroides*), Yellow Star-grass (*Hypoxis hirsuta*), Cornsalad (*Valerianella radiata*) and Two-flowered Dwarf Dandelion (*Krigia biflora*).

Long time OCANPS member Ginny Masullo organized a trip on Thursday, May 8 to the Rob and Melani Walton Preserve in Garfield. She arranged for Chas McCoy, Watershed Specialist for The Nature Conservancy, to talk about how TNC manages the property. This included a large scale project to remove non-native blackberries. Doug Zollner, ecologist for Arkansas TNC, helped out with plant identification. Chas led the 19 people who attended on a tour of a section of the property including a meadow area (where the blackberry removal occurred) and woodlands. Along the way we saw Ozark Mock Orange (*Philadelphus pubescens*), Blue Toadflax (*Nuttallanthus canadensis*) and resprouts of Ozark Chinquapin (*Castanea ozarkensis*).



Chas McCoy talks to the group at the Rob and Melani Walton Preserve. Photo by Sue Hubbard.

I don't know if it was the beautiful day in the mid 70's, the chance to learn from Jennifer Ogle (collections manager at the UARK Herbarium) or the opportunity to visit Baker Prairie. Maybe it was a combination of all three, but 30 people showed up for our field trip to Baker Prairie in Harrison on Saturday, May 31. Deb O'Donnell, an UARK Herbarium volunteer and trip co-leader, provided participants with a sheet allowing them to play plant bingo as we strolled through the prairie. Doug Zoller, ecologist for Arkansas TNC, provided plant identification for those who could not get close enough to hear Jennifer. We took the trail on the east side of the prairie because that side was burned late last year. Plants seen included pale purple coneflower (*Echinacea pallida*), Green Eyes (*Berlandiera betonicifolia*), Goat's Rue (*Tephrosia virginiana*), Bush's Poppy-Mallow (*Callirhoe bushii*), Carolina

Rose (*Rosa carolina*) and Carolina Larkspur (*Delphinium carolinianum*). We even found one Compass Plant (*Silphium laciniatum*) which had already put out a bloom.



Baker Prairie in bloom. W.O.W.!!! Photo by Scott Simon.



Jennifer Ogle co-leading the tour on Baker Prairie. Photo by Scott Simon.



The group at Baker Prairie. Photo by Scott Simon.

Botany News (Arkansas and Northern Louisiana)

High-bush blueberry (*Vaccinium virgatum*) has been treated as a separate species and also lumped into the *Vaccinium corymbosum* group. Fritsch and his colleagues looked at morphological characters, ploidy level, and DNA and found support for its taxonomic status as a recognized species! **Fritsch, P.W., A.A. Crowl, and P.S. Manos. 2025. *Vaccinium virgatum* (Ericaceae): a species to be recognized. J. Bot. Res. Inst. Texas 18(2): 293–309. 2024. <https://doi.org/10.17348/jbrit.v18.i2.1366>.**



Peter Fritsch collecting *Vaccinium* sp. in the Ouachita National Forest. Photo by Virginia McDaniel.

Kees and colleagues present a preliminary taxonomic treatment of the blue-flower eryngo (*Eryngium integrifolium* complex). They recognize five species, with two additional taxa treated at varietal rank using morphometric analysis and ecological and biogeographic evidence. **Kees, J.C., A.S. Weakley, and D.B. Poindexter. 2024. Towards a revision of the *Eryngium integrifolium* complex (Apiaceae). Phytoneuron 2024-70: 1–25. Published 11 November 2024. ISSN 2153 733X.**

Grasslands are one of the most endangered plant communities on the planet, but saving them gets much less attention than “Saving the Rainforest.” The first step in saving them is knowing where they are, no matter how small. In this paper, Kelley and Bordelon document a remarkable number of species (250) in a 0.6 hectare roadside *prairie remnant* in Webster Parish, northwestern Louisiana. Three species are state-tracked, 7 others are of unique conservation concern, and 19 represent parish records. **Kelley, J.M. and M. Bordelon. 2024. Flora and notes for a roadside prairie scrap in northwest Louisiana. Phytoneuron 2024- 59: 1–21. Published 8 August 2024. ISSN 2153 733X.**

Ohlsson and colleagues documented the plant taxa and forest structure in a *pine-hardwood forest* at Eddie D. Jones Park, Caddo Parish, Louisiana, where they identified 181 species. Few quality remnants of this forest type remain in the region and documenting their species composition is important. **Ohlsson, R., M.H. MacRoberts, B.R. MacRoberts, and J.M. Kelley. 2024. Floristics and forest structure of a pine-hardwood slope forest at Eddie D. Jones Park, Caddo Parish, northwestern Louisiana. Phytoneuron 2024-77: 1–18. Published 11 November 2024. ISSN 2153 733X.**

Raymond and several generations of botanists worked to develop an annotated, *vouchered checklist* for a 65 acre park in Caddo Parish, LA. Walter B. Jacobs Memorial Nature Park house at least 633 species including several rare plants. **Raymond, L.R., R.D. Thomas, B. and M.H. MacRoberts, and J.M. Kelley. 2024. Documented and annotated checklist of the vascular flora of the Walter B. Jacobs Memorial Nature Park, Caddo Parish, Louisiana. Phytoneuron 2024-40: 1–30. Published 6 June 2024. ISSN 2153 733X.**

Serviss and Kratz continue to document the movement of invasive species in Arkansas. In this paper they note that creeping lily-turf (*Liriope spicata*) is rapidly expanding its range but other species of lily-turf (*Liriope*) and mondo-grass (*Ophiopogon japonicus*) are also expanding. **Serviss, B.E. and J.R. Kratz. 2024. New distributional records of liriopogons (*Liriope* and *Ophiopogon*, Ruscaceae) in Arkansas. Phytoneuron 2024-78: 1–40. Published 11 November 2024. ISSN 2153 733X.**



Prairie on the side of Highway 27 in Arkansas. Photo by Virginia McDaniel.

Honoring Member Accomplishments



Leslie Patrick giving Sid Vogelpohl the Dwight Munson Moore Award. Photo by Michael Weatherford.

During the Spring 2024 Meeting on behalf of ANPS, Leslie Patrick presented Sid Vogelpohl with the Dwight Munson Moore Award for his outstanding accomplishment in authoring the ANPS Know Your Native articles for over 10 years. In case you don't know, there is a treasure trove of over 220 articles on the ANPS website, called Know Your Natives. The articles feature native plants - beautiful wildflowers, trees, shrubs, vines, and ferns. Sid and Jeanette Vogelpohl take photos of native plants from their own gardens and property in Paris to include in the articles. Sid researches and writes the articles, which are then technically reviewed by professional botanists before being published and archived on the ANPS website.

Sid documents plant growth throughout the year, and takes strikingly beautiful and detailed photos of every part of the plant, from underground roots and tubers to stems, leaves, flowers, and fruits. The articles cover the history behind plant names, plant distribution, preferred habitat, and details about each plant's characteristics and growth habits, faunal associations, and related plant species.

*Dr. Dwight Munson Moore was an Arkansas botanist and college professor who authored many scientific publications, but perhaps his best-known publication is *Trees of Arkansas*. The ANPS Dwight Moore Award is given in Dr. Moore's honor to persons with outstanding achievement in either research or publication on Arkansas botany. Past recipients include Edwin B. Smith, Carl Hunter, Carl Slaughter, and Jennifer Ogle.*



Eric Fuselier presented MaryAnn King with the Eric and Milanne Sundell Award. Photo by ANPS Member.

During the Spring 2025 Meeting on behalf of ANPS, Eric Fuselier presented MaryAnn King (photo above, right) with the Eric and Milanne Sundell Award. MaryAnn was put forward by Eric Sundell, who wrote in his nomination letter:

MaryAnn has provided strong, energetic support for our organization since its early years—back in the last century! She's been an active participant of both the statewide Society and the Northwest Chapter. She was our Memorial Awards Officer for several years. She is still (as far as I know) one of our auctioneers. But most importantly, as owner and operator of Pine Ridge Gardens, she pioneered gardening with Arkansas' native plants—and did so at a time before other sources of natives were commercially available, when the only natives in our gardens were redbuds and flowering dogwoods, when Wild Ones was decades in the future... MaryAnn single-handedly built a foundation for native gardening in Arkansas. Through the sale of a wide choice of native plants as well as contributions of natives to our annual auctions and organized field trips to her nursery in London, she allowed ANPS members to grow the plants we loved and admired on our field trips. And throughout her years of hard work and commercial success, she remained a stalwart ANPS contributor. She's been an inspiration to our membership. ANPS and Pine Ridge Gardens have been like siblings all their lives—they grew up together, intertwined like, say, muscadine and yellow jessamine.

Hear, hear, Eric!

Upcoming Field Trips

Arkansas River Trail with Eric Sundell

Saturday, October 21, 2025, 10:00 a.m. to 12:00 p.m.

2801 River Rd, North Little Rock, AR 72114-3954

Meeting Location: [Riverview Skateboard Park](#) on River Road in North Little Rock (34.769117, -92.296507)

Join Eric Sundell and John Simpson for a pleasant fall walk along the River Trail. It is a spectacular site between the river and the high cliffs to the north, and it's loaded with giant trees—cottonwood, American elm, green ash and box elder. And possibly woodchucks! This is an easy walk and will be on a trail.



Theo Witsell and Eric Sundell introduce the group to Lorange Creek Natural Area, Spring ANPS Meeting, 2025. Photo by Jennifer Ogle.

Directions:

From I-40, take exit 152 or 152B (if west-bound) for MacArthur Blvd. (AR-365) toward Pike Ave. Head South on MacArthur Blvd. and keep R at the fork to stay on MacArthur Blvd. In roughly 0.9mi., turn W (R) on W 18th St. At intersection of W18th. St. and Crutcher St. (5-way intersection), slight right onto Fort Roots Dr. Stay left at the fork to remain on Fort Roots Dr. In 1,000ft., keep L at

the fork. Take next R onto Paul Duke Dr. then W (L) onto River Rd. Take immediate L and park in the lot for the Riverview Skateboard Park.

Winter Botany Walk at Smith Creek Preserve

February 28, 2026, 10:00 a.m. to 1:00 p.m.

Meeting Location: Smith Creek Preserve Trailhead (35.934519, -93.385796) <https://maps.app.goo.gl/qc47kzgQ52fjBAQK6>

Join Jennifer Ogle and Andrew Ruegsegger of the University of Arkansas Herbarium on a winter botany tour of The Nature Conservancy's Smith Creek Preserve, a 1,300+ acre natural area in Newton County that protects the largest colony of Indiana bats in the state. During the walk we'll see many species of trees and shrubs in their winter condition, including beech, umbrella magnolia, cucumber magnolia, and Ozark witch hazel. Bring water and a sack lunch, wear sturdy boots, and dress for winter weather.

Level of Difficulty: The trail is rated as moderate to strenuous and is 1.5-2 miles round trip.

Directions: Meet at the Smith Creek Preserve parking area, located about 3 miles south of the Boxley Valley Church on Hwy 21. More information about Smith Creek Preserve and a map with directions to the property can be found on The Nature Conservancy's website at <https://www.nature.org/.../places.../smith-creek-preserve/>.

Please note: In case of inclement weather, this trip will be canceled, and an announcement will be made on the ANPS and UARK Facebook pages.

Spring Walk on Rich Mountain

April 10, 2026, 10:00 a.m. – 1:00 p.m.

Meeting Location: [Queen Wilhelmina Lodge](#) on top of Rich Mountain (34.6840639, -94.3704817). Meet in the parking lot outside the lodge.

Come spend a (most likely) misty spring morning in the Ouachita Oak Montane Forest on top of the second highest peak in Arkansas with Jennifer Ogle (University of Arkansas Herbarium) and Virginia McDaniel (Forest Service botanist). Rich Mountain is known for its sky island forest of stunted oak woodlands and rich herbaceous vegetation. Trail will be rugged and rocky so bring some sturdy walking shoes.

RSVP Virginia McDaniel at 828-545-2062.

2025 Fall Treasurer's Report

2025 through 31 July				
Cash, 1 January 2025			\$12,117.12	
	2025 Budget	2025 Actual (as of 31 July)	Σ	Proposed 2026 Budget
Income				
Membership Dues	\$4,500.00	\$2,225.82		\$4,500.00
Meeting Registration	\$1,500.00	\$470.00		\$1,500.00
Silent Auction	\$1,000.00	\$785.00		\$1,000.00
Merchandise Sales	\$1,000.00	\$189.00		\$1,000.00
Contributions & Grants	\$2,000.00	\$6,412.29		\$2,000.00
	\$10,000.00	\$10,082.11	\$10,082.11	\$10,000.00
Expenditures				
ANPS.Org	\$190.00	\$615.00		\$99.00
Bulk Mail*	\$320.00	-		-
Claytonia	\$2,400.00	\$369.60		\$200.00
Directory	\$1,500.00	-		-
Memorial Awards, Grants, and Scholarships	\$10,000.00	\$2,500.00		\$8,000.00
Garden Grants	\$1,000.00	-		\$1,000.00
Meeting Expenses	\$1,000.00	\$422.57		\$1,000.00
Tabling Events	-	-		-
Webinar Series	\$163.00	-		\$163.00
Merchandise Purchases	\$500.00	-		\$500.00
Supplies (Postage, PayPal fees, etc.)	\$300.00	\$170.81		\$300.00
	\$17,373.00	\$4,077.98	\$4,077.98	\$11,262.00

Cash, as of 31 July **\$18,121.25**

**This fee was successfully refunded on 5/19, since ANPS will no longer be mailing Claytonia in bulk.*

Respectfully submitted by Samantha Heller, Treasurer

Botanizing the Parking Lot

by Virginia McDaniel

In true Sundell-the-field-trip-leader fashion, Jennifer Ogle (University of Arkansas Herbarium collections manager) and Virginia McDaniel (Southern Research Station botanist) led a plant walk that did not leave the parking lot. This was partly because the road ended in a bayou with alligator infested waters and the only trails in the area required a boat, but also because this was one diverse parking lot!



Bottomland slough with bald cypress (*Taxodium distichum*).
Photo by Virginia McDaniel.

Cut-off Creek Ravines Natural Area contains two ravines that start in upland pine-oak forest and empty into mixed oak and beech forest that transitions to bottomland hardwood forest. This 376-acre natural area is managed by the Arkansas Natural Heritage Commission and is part of a larger Cut-off Creek Wildlife Management Area that is comanaged with the Arkansas Game and Fish Commission. This area conserves Coastal Plain Forest and the transition from Coastal Plain to Mississippi Alluvial Plain Forest.

As one of the walk leaders is a co-author of Trees, Shrubs, and Woody Vines of Arkansas, we were obviously going to talk about woody plants. Jennifer did not disappoint. The classic bottomland species, bald cypress (*Taxodium distichum*), was hard to miss and its feathery leaves were gorgeous silhouetted against the deep blue sky. We saw swamp chestnut oak (*Quercus michauxii*), which has

leaves that are downy to the touch on the lower surface, a character important for distinguishing it from a similar looking species, chinquapin oak (*Quercus muehlenbergii*). And yes, habitat was another big clue. swamp chestnut oak, as the name suggests, is found along moist to wet, well-drained bottomland, floodplains and along streams, while chinquapin oak is a more upland species often found in limestone-rich, mixed deciduous forests. Other nice bottomland species included “our most hydric oak” as Eric Sundell calls overcup oak (*Quercus lyrata*), cedar elm (*Ulmus crassifolia*), and water locust (*Gleditsia aquatica*).

The cul-de-sac area of the parking lot and adjacent woods were relatively open, allowing for a number of forbs and graminoids to thrive. A flowering milkweed is always a star, but purple milkweed (*Asclepias purpurascens*) was a shooting star on a dark night. Vibrant! Several species that we don’t see much in the mountains and must prefer the coastal plain are Boykin’s cluster pea (*Lackeya multiflora*), Carolina wild petunia (*Ruellia caroliniensis*), coffee-bean (*Sesbania herbacea*) and lance-leaf water-willow (*Justicia ovata* var. *lanceolata*). A grass had us stumped during our scouting but turned out to be Arkansas manna grass (*Glyceria septentrionalis* var. *arkansana*) - a county record! Another treat for us was not a rare plant, but a plant we rarely see - Rattle-weed



Purple milkweed (*Asclepias purpurascens*). *Photo by Virginia McDaniel.*

(*Astragalus canadensis*). I learned this genus in the deserts of the western US, where there are a million species (not really, but there are a lot!), all small in stature with a muted gray appearance from the hairs that cover the leaves to conserve every bit of moisture. Many of these *Astragalus* species have narrow ranges of just a few counties. In comparison, rattle-weed is gigantic, green, and found in nearly every state in the US, with Arkansas near the southern edge. Common plants can be exciting to find when you are near the edge of their range.

We kept the parking lot vibe going on our drive back to town when we stopped briefly to walk across the Wolf Creek bridge, where we saw several more bottomland species from the comfort of the road, including Carolina ash (*Fraxinus caroliniana*), swamp-privet (*Forestiera acuminata*), American wisteria (*Wisteria frutescens*), and swamp red maple (*Acer rubrum* var. *drummondii*).



Afternoon Cut-off Creek Ravines Natural Area group—perhaps the youngest average age of any recent ANPS field trip. Camera positioned by Jenna Miladin.

Remembering Milanne Sundell

The Arkansas Native Plant Society lost a member and dear friend this year. Milanne Sundell died in her home on January 22, 2025 surrounded by her family.

Milanne was born in Seymour, IN and graduated from Long Beach High School on the Mississippi Gulf Coast and from Millsaps College in Jackson, MS. She taught English with the Peace Corps (1965-67) in Tunisia, North Africa where she met her husband, Eric, on a desert camel trip out of Douz. They raised their family of three sons (Michael, Jack and Joe) in Monticello, AR where Eric taught Botany at the University of Arkansas.

Milanne was a long time member of the Arkansas Native Plant Society and constant presence at meetings who, along with renowned trip leader Eric, built a solid foundation for the Arkansas Native Plant Society. Her welcoming spirit, interesting conversations, kindness, and hard work kept the organization going and made all of us want to return for more.

Because of the Sundells' dedication and commitment to the Arkansas Native Plant Society, the board created a new Award in 2023 in their honor – The Eric and Milanne Sundell Award. As Isaac Ogle says - "They are the mortar that holds us all together" and that mortar is solid. We are thankful for our time together and miss her dearly.



Milanne and her son Jack with goats at Heifer Ranch in Perryville. Photo by Eric Sundell.

We miss her loving heart, her brilliant, generous, never-selfish mind with that extraordinary memory, her happy spirit. "A merry heart does good like a medicine." - from the obituary for Milanne Sundell.

President's Message

We are in the midst of heat and more heat- a good time to hunker down (if you can) and ride it out until things cool off a bit. Reality is different though - I, for one, don't slow down in the summer because that's when I get my most serious planting and outside project "itches." I suspect this to be almost universal amongst our membership whether from our passions, interests, and/or jobs that take us outside. It will be frigid cold soon enough, so we enjoy the growing plants while we can!

Our President-Elect (Andrew Rueggeger), has planned out a wonderful fall meeting in Harrison. We'll have the fun live auction so please bring items to bring in funds for grants and scholarships! With canning season strongly upon us – don't forget that jams, jellies, fruit butters,



Sarah Geurtz, ANPS President.

and honey are all popular items – they'll bring in some good money as well as plants, books, art, and photography do!

Art Browning (Vice President) has been working our specifics for the spring and fall meetings in 2026 and I am very excited for those! I probably shouldn't put anything in official writing here but know that the board is excited about them.

I'm looking forward to this fall when I'll learn more new things about plants and nature, and I look forward to seeing all my old friends again!

Warmly,

Sarah Geurtz

ANPS President

Arkansas Native Plant Society Membership Application

Membership Categories

- ☐ \$10 Student
- ☐ \$15 Individual
- ☐ \$20 Supporting
- ☐ \$25 Family
- ☐ \$30 Contributing
- ☐ \$150 Lifetime (age 55+)
- ☐ \$300 Lifetime (under age 55)

- ☐ New Member
- ☐ Renewal
- ☐ Address Change

- ☐ Opt in to receive paper *Claytonia*

Name(s) _____

Address _____

City _____ State _____ Zip _____

Phone _____ Email _____

Mail this completed form with a check made payable to the Arkansas Native Plant Society to:

Samantha Heller, Treasurer
8461 Apple Glen
Rogers, Arkansas 72756

JOIN OR RENEW ONLINE INSTEAD! Details at anps.org/join.



CLAYTONIA

Virginia McDaniel | Editor
virginiamcd31@yahoo.com

Please don't forget to renew your membership!

The calendar year is the membership year.

To renew your membership, fill out the application for membership on page 24 and mail it to the address on the form.

Or renew online at anps.org/join.

BOTANIST PETS



Sleeping dogs and overzealous cats. Photos by Virginia McDaniel.

Your parent may be a botanist if you use a plant press for your pillow.

How do you make plant pressing more exciting? Invite a cat and see if you can get the plant in the press without being attacked.

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